LDEQ-EDMS Document 13410580, Page 1 of 420

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CP2 LNG
CP EXPRESS

1001 19TH Street North
Suite 1500
Arlington, Virginia 22209

O 202.759.6740
F 703.243.1813
www.ventureglobalIng.com

LDEQ RECEIPT
2022 JUL 29 PM 12:26

July 29, 2022

Ms. Bliss Higgins
Assistant Secretary
Office of Environmental Services
Louisiana Department of Environmental Quality
P.O. Box 4313
Baton Rouge, LA 70821-4313

RE: Venture Global CP Express, LLC
Moss Lake Compressor Station
Moss Lake, Calcasieu Parish, Louisiana
Initial Title V Permit and PSD Permit Application
Agency Interest No.: 232173

Dear Ms. Higgins,

Venture Global CP Express, LLC, a wholly owned subsidiary of Venture Global LNG, Inc. (Venture Global), proposes to site, construct, and operate a natural gas compressor station, the Moss Lake Compressor Station, near Moss Lake in Calacasieu Parish. Accordingly, Venture Global is submitting the enclosed Title V Air Permit and Prevention of Significant Deterioration Permit Application to obtain the required air permits from the Louisiana Department of Environmental Quality.

Pursuant to Louisiana Administrative Code (LAC) 33:III.223.A, Table 1, Fee No. 1430 and LAC 33:III.211.A, the permit fee of $116,631.90 is included with this submittal. Additionally, Venture Global requests an expedited review of the enclosed permit application. In accordance with LAC 33:I.Chapter 18, the Request for Expedited Permit Processing form is attached to

RECEIVED
JUL 29 2022
By

VENTURE GLOBAL LNG

LDEQ-EDMS Document 13410580, Page 2 of 420

this cover letter.

If you have any questions or need additional information, please contact me at (202) 759-6738 or at fmusser@VENTUREGLOBALLNG.COM. You may also contact Rahul Pendse of Trinity Consultants at (225) 346-4003 or at rpendse@trinityconsultants.com.

Sincerely,

Fory Musser
Senior Vice President, Development

Attachments
cc: Mr. Rahul Pendse, P.E. (Trinity Consultants)
cc: EPA Region VI – via e-mail

Friday, July 29, 2022
1:21:53 PM

RECEIPT OF CHECK

Master AI #:	232173
Name on Check:	Venture Global LNG Inc
Master File Name:	Venture Global CP Express LLC - Moss Lake Compr
Check Received Date:	7/29/2022
Check Date:	7/29/2022
Check Number:	001136
Check Amount ($):	$116,631.90
Staff Entry:	P00333122
Date data entered:	7/29/2022
Media:	AIR
Comments:	Title V Permit Initial and PSD (Prevention of Significant Deterioration)

ORIGINAL

VENTURE GLOBAL CP EXPRESS, LLC

Moss Lake Compressor Station

INITIAL TITLE V PERMIT AND PSD PERMIT APPLICATION

AI No. 232173

July 2022

Trinity Project No. 221901.0053

Trinity Consultants

INITIAL TITLE V PERMIT AND PSD PERMIT APPLICATION

Venture Global CP Express, LLC
Moss Lake Compressor Station

TRINITY CONSULTANTS
301 Main Street
Suite 900
Baton Rouge, Louisiana 70825
(225) 346-4003

July 2022

Project No. 22901.0053

Trinity Consultants

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1. INTRODUCTION

Venture Global CP Express, LLC (CP Express), a wholly owned subsidiary of Venture Global LNG, Inc. (Venture Global LNG), proposes to site, construct, and operate the Moss Lake Compressor Station, a natural gas compressor station near Moss Lake in Calcasieu Parish, Louisiana. The compressor station will recompress natural gas through transmission lines using gas turbine-driven compressor units to facilitate natural gas delivery through pipelines to Venture Global CP2 LNG, LLC's proposed liquefied natural gas (LNG) terminal in Cameron Parish, Louisiana (Terminal Facilities). CP Express is submitting this application to the Louisiana Department of Environmental Quality (LDEQ) to request authorization to construct and operate the Moss Lake Compressor Station in accordance with the LDEQ Title V Operating Permits Program and Prevention of Significant Deterioration (PSD) Program.

1.1 FACILITY AND OPERATIONAL OVERVIEW

The Moss Lake Compressor Station will be located on approximately 60 acres of land in Calcasieu Parish, Louisiana near Moss Lake near milepost (MP) 44.4 of the CP Express Pipeline. Natural gas will be transported to the Moss Lake Compressor Station via a natural gas pipeline owned and operated by CP Express. The Moss Lake Compressor Station will be constructed in two phases: in Phase 1, two (2) 34,800 horsepower (hp) natural gas-fired combustion turbines will be installed and in Phase 2, three (3) 34,800 hp natural gas-fired combustion turbines and one 13,000 hp gas-driven booster compressor unit will be installed. Once completed, there will be total available power of 187,000 hp. It is anticipated that five emergency generators will be located on-site for emergency power. Condensate will be separated from the natural gas and stored in a storage tank until subsequent loadout via truck. The compressor station will also include a 48-inch-diameter pig launcher and receiver. The five natural gas-fired combustion turbines will be utilized to drive the compressor units to transport the natural gas via pipeline to the Terminal Facilities.

1.2 AIR EMISSIONS SUMMARY

The proposed air emission sources associated with the Moss Lake Compressor Station are provided in Table 1-1.

Table 1-1. Proposed Air Emission Sources – Moss Lake Compressor Station

Emission Point ID	Source Description
ASCCT1 – ASCCT5	Aeroderivative Simple Cycle Combustion Turbines 1 – 5
EGEN1 – EGEN5	Diesel Emergency Generators 1 – 5
FUG01	Fugitive Emissions
TK01	Condensate Storage Tank
N/A	Insignificant Activities (Diesel Storage Tanks, Antifoam Storage Tanks, Lube Oil Storage Tanks)
N/A	General Condition XVII Activities (Misc. Venting from Filter Separators, Pipeline Pigging, Condensate Truck Loading, and Station Suction and Discharge Blowdowns)

Facility-wide potential-to-emit (PTE) emissions from the Moss Lake Compressor Station includes criteria pollutants greater than the Title V major source threshold of 100 tons per year (tpy). The facility's PTE will exceed the PSD major modification thresholds for particulate matter less than 10 micrometers in diameter (PM_{10}), particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$), nitrogen dioxide (NO_X), carbon monoxide (CO), volatile organic compounds (VOC), and greenhouse gases (GHGs). Thus, the Moss Lake Compressor Station will be classified as a major source under Title V and PSD regulations. Additionally, Louisiana has a Comprehensive Toxic Air Pollutant (TAP) Emission Control Program codified in LAC 33:III.Chapter 51. Under this state-only program, a major source is defined as any stationary source that emit 10 tpy of any individual HAP/TAP or 25 tpy of combined HAPs/TAPs (aggregate of all HAPs/TAPs) listed in Table 51.1 of LAC 33:III.Chapter 51. The facility-wide PTE will be less than the major source thresholds of 10 tpy for individual HAP/TAP and 25 tpy (aggregate of all HAPs/TAPs). Therefore, the Moss Lake Compressor Station is not a major source of HAP/TAP. Table 1-2 provides the proposed facility-wide PTE emission rates for the Moss Lake Compressor Station.

Table 1-2. Facility-Wide Emissions Summary, tpy

Pollutant	Proposed Emissions (tpy)
PM_{10}	100.40
$PM_{2.5}$	100.40
Sulfur Dioxide (SO_2)	3.80
NO_X	323.45
CO	482.10
Total VOC	144.86
Carbon Dioxide equivalent (CO_2e)	726,818
Acetaldehyde	0.25
Acrolein	0.040
Benzene	0.07
Ethylbenzene	0.20
Formaldehyde	4.25
Hydrogen sulfide	0.06
Naphthalene (and compounds)	0.05
n-Hexane	0.27
Polynuclear Aromatic Hydrocarbons	0.015
Propylene Oxide	0.15
Toluene	0.81
Xylene (mixed isomers)	0.41

1.3 APPLICATION CONTENTS

Sections 2 and 3 of this application contain the regulatory applicability analysis and Best Available Control Technology (BACT) Analysis, respectively. Section 4 of this application contains the required Application for Approval of Emissions (AAE) which includes the Emission Inventory Questionnaire (EIQ) forms and the regulatory applicability tables (State and Federal). Section 5 provides the Environmental Assessment Statement (EAS or "IT" Question Responses). Appendix A provides an area map. Detailed emission calculations are included in Appendix B. Appendix C provides the emission calculations associated with Insignificant Activities and General Condition (GC) XVII Activities that are being proposed as part of this application. The RACT/BACT/LAER Clearinghouse search results for all pollutants subject to BACT are provided in Appendix D with additional BACT supporting documentation (e.g., economic cost documentation) included in Appendix E. The Certificate of Good Standing is included as Appendix F. The Air

Quality Dispersion Modeling Report is included as Appendix G. The Secondary $PM_{2.5}$ and Ozone Impacts Analysis is included in Appendix H.

2. REGULATORY APPLICABILITY

This section provides an overview of state and federal air quality regulations that are applicable to the Moss Lake Compressor Station. A detailed state and federal air quality regulatory analysis is provided in Section 22 of the AAE.

2.1 APPLICABLE REGULATIONS

Section 22 of the AAE provides citations and descriptions of applicable Louisiana and federal air quality regulations for all emission sources proposed in this application per LAC 33:III.517.D.10. The Moss Lake Compressor Station is subject to the indicated Louisiana and federal air quality regulations, including New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs).

The summary provided in Section 22 of the AAE consists of Tables 1 through 4, which describe and cite applicable requirements. Table 1 is a matrix identifying applicable, potentially applicable, and non-applicable requirements. Table 2 describes applicable Louisiana and federal air quality requirements, including applicable compliance monitoring devices, activities, or methods and compliance testing requirements. Table 3 summarizes regulatory exemptions and statements of non-applicability. Table 4 lists equipment routed to control devices as well as proposed emission caps and their respective emission sources.

In addition to the specific requirements, there are general requirements for sources subject to NSPS and NESHAP standards. All sources subject to the NSPS and NESHAP standards are also subject to the applicable provisions of the relevant Subpart A. As stated in Section 1.2, the Moss Lake Compressor Station will be an area source of TAPs; therefore, the requirements specified under the Louisiana Air Toxics Program (LAC 33:III.Chapter 51) do not apply to the Moss Lake Compressor Station.

2.2 PREVENTION OF SIGNIFICANT DETERIORATION (PSD)

PSD applies both to new major stationary sources and to major modifications to existing major stationary sources with respect to each pollutant regulated under LAC 33:III.509 for which the area is designated as attainment/unclassified. Calcasieu Parish is currently designated as attainment or unclassified for all criteria pollutants. Hence, a PSD applicability assessment was performed for all PSD subject pollutants emitted from the Moss Lake Compressor Station. The PSD major source threshold for the facility is 250 tpy of a criteria pollutant, as the facility type is not one of the listed 28 source categories in Table A of LAC 33:III.509.B.

Based on Table 2-1, the facility's PTE will exceed the PSD major source threshold of 250 tpy for NO_X and CO, and therefore, triggers PSD review for these pollutants. Since PSD review is triggered for NO_X and CO, all other pollutants are compared against their respective Significant Emission Rate (SER). Table 2-1 summarizes this analysis and shows that PSD review is also triggered for PM_{10}, $PM_{2.5}$, VOC, and GHGs.

Table 2-1. PSD Applicability Analysis Summary

Pollutant	Project Emissions (tpy)	PSD Significant Emission Rate (SER) Level (tpy)	PSD Significance Emission Rate Exceeded? (Yes/No)
PM_{10}	100.40	15	Yes
$PM_{2.5}$	100.40	10	Yes
NO_X	323.45	40	Yes[1]
SO_2	3.80	40	No
CO	482.10	100	Yes[1]
VOC	144.86	40	Yes
Lead	--	0.6	No
H_2S	0.06	10	No
CO_2e	726,818	75,000	Yes

[1] CO and NO_X exceeded the 250 tpy threshold, triggering PSD analysis.

2.3 NONATTAINMENT NEW SOURCE REVIEW (NNSR)

The Moss Lake Compressor Station will be located in Calcasieu Parish, which is not classified as a non-attainment parish for any regulated pollutants under the NNSR program. Therefore, NNSR does not apply.

2.4 MACT AND LOUISIANA AIR TOXIC REGULATIONS

Louisiana TAP regulations are codified in LAC 33:III.Chapter 51 and include both HAPs under Section 112 of the federal Clean Air Act and TAPs. LAC 33:III.Chapter 51 requires major sources of HAPs/TAPs to comply with applicable MACT standards and sources that have the potential to emit Class I and Class II TAPs in excess of their corresponding Minimum Emission Rate to comply with state MACT standards and applicable Ambient Air Standards. As stated in Section 1.2, the Moss Lake Compressor Station is an area source of HAP/TAP and, therefore, LAC 33:III.Chapter 51 does not apply.

2.5 CHEMICAL ACCIDENT PREVENTION REGULATIONS

Subpart B of 40 CFR 68 outlines requirements for risk management plans pursuant to Section 112(r) of the Clean Air Act. Applicability of the subpart is determined based on the type and quantity of chemicals stored at a "stationary source." The Moss Lake Compressor Station does not produce, process, handle, or store any referenced list substance greater than the threshold amounts. Thus, the requirements of 40 CFR Part 68 do not apply.

2.6 STRATOSPHERIC OZONE PROTECTION

Title VI of the Clean Air Act Amendments requires phase-out of ozone-depleting chemicals. The stratospheric ozone protection provisions have been codified under 40 CFR 82. The Moss Lake Compressor Station shall comply with the applicable requirements of 40 CFR Part 82.

2.7 COMPLIANCE MONITORING DEVICES OR ACTIVITIES

All compliance monitoring devices or activities required under the applicable regulations are provided in Table 2 in Section 22 of the AAE.

In accordance with LAC 33:III.517.D.4, compliance monitoring devices or activities have been identified for each applicable regulation and for each emission point. Table 2 in Section 22 of the AAE provides the compliance monitoring requirements, which will be followed by the Moss Lake Compressor Station in order to comply with the applicable requirements. In the event there are multiple options available in the regulation to demonstrate compliance, the specific option chosen by the Moss Lake Compressor Station has been clearly identified. Additionally, where alternative monitoring methods are allowed and have been used, they have been provided in Table 2 in Section 22 of the AAE.

2.8 TEST METHODS AND PROCEDURES

The test methods and procedures requiring implementation under the applicable regulations are provided in Table 2 in Section 22 of the AAE.

2.9 COMPLIANCE ASSURANCE MONITORING (CAM)

The purpose of the CAM rule is to ensure that operators maintain control device performance at levels that assure compliance. The rule allows operators to design CAM plans based on current requirements and operating practices, to select representative parameters upon which compliance can be assured, to establish indicator ranges (or procedures for setting ranges) for the parameters, to use testing or other operating data to verify the parameters and ranges, and to correct control device performance problems as expeditiously as practicable.

The CAM rule requires monitoring plans (CAM plans) for every pollutant-specific emissions unit (PSEU) that is located at a facility where a Part 70 or 71 permit is required and that meet all of the following criteria:

- Is subject to an emission limitation or standard;
- Uses a control device to achieve compliance; and
- Has pre-control emissions that exceed or is equivalent to the major source threshold under the Title V operating permit program (100 tpy of criteria pollutant, 10 tpy of a hazardous air pollutant (HAP), or 25 tpy of combined HAPs).

None of the proposed emission sources at the Moss Lake Compressor Station are subject to CAM requirements as detailed in Table 3 of Section 22 of the AAE.

2.10 GC XVII AND INSIGNIFICANT ACTIVITIES

Planned and predictable activities have been identified at the Moss Lake Compressor Station and qualify under the Louisiana GC XVII regulations. Section 19 of the AAE provides a detailed list of the proposed GC XVII Activities with supporting emission calculations provided in Appendix C.

Additionally, several storage tanks at the Moss Lake Compressor Station meet the criteria to qualify as an Insignificant Activity. Section 20 of the AAE provides the proposed Insignificant Activities and Appendix C provides the detailed emission calculations.

3. BEST AVAILABLE CONTROL TECHNOLOGY ANALYSIS

This section presents the Best Available Control Technology (BACT) analysis in support of this initial PSD/Title V Permit Application.

Pursuant to LAC 33:III.509.J., a BACT analysis is required for each new or physically modified emissions unit for each pollutant that is subject to PSD review. BACT is defined in LAC 33:III.509.B. as:

> *a. an emission limitation, including a visible emission standard, based on the maximum degree of reduction for each pollutant subject to regulation under this Section that would be emitted from any proposed major stationary source or major modification that the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant;*
>
> *b. in no event shall application of best available control technology result in emissions of any pollutant would exceed the emissions allowed by any applicable standard under 40 C.F.R. Parts 60 and 61. If the administrative authority determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.*

Emphasis added. The underlined terms in the BACT definition merit further discussion.

3.1 BACT DEFINITION

3.1.1 Emission Limitation

BACT is "an emission limitation," not an emission reduction rate or a specific technology. While BACT is prefaced upon the application of technologies reflecting the maximum reduction rate achievable, the final result of BACT is an emission limit. Typically, when quantifiable and measurable[1], this limit would be expressed as an emission rate limit of a pollutant (e.g., lb/hr, tpy, kg/MMBtu, ppm, or lb/MW-hr).[2]

3.1.2 Each Pollutant

BACT is analyzed for each pollutant for which PSD review is triggered, not a combination of pollutants, even where the technology reduces emissions of more than one pollutant. Analyzing pollutants individually is particularly important when performing cost analyses.

[1] The definition of BACT allows use of a work practice where emissions are not easily measured or enforceable. LAC 33:III.509.B., definition of Best Available Control Technology (BACT).
[2] Emission limits can be broadly differentiated as "rate-based" or "mass-based." For a boiler, a rate-based limit would typically be provided in units of lb/MMBtu (mass emissions per heat input). In contrast, a typical mass-based limit would be in units of lb/hr (mass emissions per time).

3.1.3 BACT Applies to the Proposed Source

BACT applies to the type of source proposed by the applicant. BACT does not redefine the source. The applicant defines the source (i.e., its goals, aims, and objectives). Although BACT is based on the type of source as proposed by the applicant, a key task for the reviewing agency is to determine which parts of the proposed process are inherent to the applicant's purpose and which parts may be changed without changing that purpose.[3]

3.1.4 Case-by-Case Basis

The PSD program's BACT evaluation is case-by-case. As noted by the United States Environmental Protection Agency (U.S. EPA),

> *The case-by-case analysis is far more complex than merely pointing to a lower emissions limit or higher control efficiency elsewhere in a permit or a permit application. The BACT determination must take into account all of the factors affecting the facility, such as the choice of [fuel]... The BACT analysis, therefore, involves judgment and balancing.*[4]

To assist applicants and regulators with the case-by-case process, in 1990 U.S. EPA issued a Draft Manual on New Source Review permitting which included a "top-down" BACT analysis.

The five steps in a top-down BACT evaluation can be summarized as follows:

- Step 1. Identify all possible control technologies;
- Step 2. Eliminate technically infeasible options;
- Step 3. Rank the technically feasible control technologies based upon emission reduction potential;
- Step 4. Evaluate ranked controls based on energy, environmental, and/or economic considerations; and
- Step 5. Select BACT.

3.1.5 Achievable

BACT is to be set at the lowest value that is "achievable." However, there is an important distinction between emission rates achieved at a specific time on a specific unit, and an emission limitation that a unit must be able to meet continuously over its operating life.

As discussed by the United States Court of Appeals for the District of Columbia Circuit when reviewing the equivalent federal PSD BACT requirements:

> *In National Lime Ass'n v. EPA, 627 F.2d 416, 431 n.46 (D.C. Cir. 1980), we said that where a statute requires that a standard be "achievable," it must be achievable "under most adverse circumstances which can reasonably be expected to recur."*[5]

U.S. EPA Environmental Appeals Board has reached a similar conclusions when reviewing a challenge to a PSD permit, stating as follows:

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[3] U.S. EPA, Environmental Appeals Board decision, *In re: Prairie State Generating Company.* PSD Appeal No. 05-05, decided Aug. 24, 2006. Available at: https://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/CAA~Decisions/7414685644289CEB852571D4006785E2/$File/Prairie%20State.pdf. Accessed July 2022.

[4] U.S. EPA. *Draft New Source Review Workshop Manual,* Chapter B. Research Triangle Park, North Carolina. Oct. 1990.

[5] Sierra Club v. EPA, 167 F.3d 658 (D.C. Cir. 1999).

> *Agency guidance and our prior decisions recognize a distinction between, on the one hand, measured "emissions rates," which are necessarily data obtained from a particular facility at a specific time, and on the other hand, the 'emissions limitation' determined to be BACT and set forth in the permit, which the facility is required to continuously meet throughout the facility's life. Stated simply, if there is uncontrollable fluctuation or variability in the measured emission rate, then the lowest measured emission rate will necessarily be more stringent than the "emissions limitation" that is "achievable" for that pollution control method over the life of the facility. Accordingly, because the "emissions limitation" is applicable for the facility's life, it is wholly appropriate for the permit issuer to consider, as part of the BACT analysis, the extent to which the available data demonstrate whether the emissions rate at issue has been achieved by other facilities over a long term.*[6]

Thus, BACT must be set at an emission rate with which the facility can stay in compliance for the lifetime of the facility, on a continuous basis. As a result, while viewing individual unit performance can be instructive in evaluating what BACT might be, any actual performance data must be viewed carefully, as rarely will the data be adequate to truly assess the performance that a unit will achieve during its entire operating life.

To assist in meeting the BACT limit, the source must consider production processes or available methods, systems, or techniques, as long as those considerations do not redefine the source.[7]

3.1.6 Production Process

The definition of BACT lists both production processes and control technologies as possible means for reducing emissions.

3.1.7 Available

The term "available" in the definition of BACT is implemented through a feasibility analysis - a determination that the technology being evaluated is demonstrated or available and applicable.

3.2 BACT METHODOLOGY

In a memorandum dated December 1, 1987, the U.S. EPA stated its preference for a "top-down" BACT analysis.[8] After determining if any NSPS is applicable, the first step in this approach is to determine, for the emission unit in question, the most stringent control available for a similar or identical source or source category. If it can be shown that this level of control is technically, environmentally, or economically infeasible for the unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any

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[6] U.S. EPA Environmental Appeals Board decision, *In re: Newmont Nevada Energy Investment L.L.C, TS Power Plant.* PSD Appeal No. 05-04, Dec. 21, 2005. Available at: https://yosemite.epa.gov/oa/eab_web_docket.nsf/Appeal~Number/E9DC0DB8E0AC5C5D852570DE00676081/$File/Newmont.pdf. Accessed July 2022.

[7] For criteria pollutants, the least stringent emission rate allowable for BACT is any applicable limit under either New Source Performance Standards (NSPS – Part 60) or National Emission Standards for Hazardous Air Pollutants (NESHAP – Part 61). Because no greenhouse gase (GHG) emissions limits have been incorporated into any existing NSPS or Part 61 NESHAPs, no floor for a GHG BACT analysis is available for consideration.

[8] U.S. EPA, Office of Air and Radiation. Memorandum from J.C. Potter to the Regional Administrators. Washington, D.C. Dec. 1, 1987.

substantial or unique technical, environmental, or economic objections. Presented below are the five basic steps of a top-down BACT review as identified by the U.S. EPA.[9]

3.2.1 Step 1 – Identify All Control Technologies

Available control technologies are identified for each emission unit in question. The following methods are used to identify potential technologies: 1) researching the Reasonably Available Control Technology (RACT)/BACT/Lowest Achievable Emission Rate (LAER) Clearinghouse (RBLC) database, 2) surveying regulatory agencies, 3) drawing from previous engineering experience, 4) surveying air pollution control equipment vendors, and/or 5) surveying available literature. Historically, the U.S. EPA has not considered the BACT requirement as a means to redefine the design of a source when considering available control technologies.[10,11] A control technology or alternative production process that would be inconsistent with the fundamental objectives or basic design of a source would "redefine the source" and may be eliminated in Step 1 of the top-down BACT analysis.

3.2.2 Step 2 – Eliminate Technically Infeasible Options

After the identification of control options, an analysis is conducted to eliminate technically infeasible options. A control option is eliminated from consideration if there are process-specific conditions that prohibit the implementation of the control technology or if the highest control efficiency of the option would result in an emission level that is higher than any applicable regulatory limits, such as a New Source Performance Standard (NSPS).

3.2.3 Step 3 – Rank Remaining Control Options by Effectiveness

Once technically infeasible options are removed from consideration, the remaining options are ranked based on their control effectiveness. Trinity considered total control efficiency and/or outlet concentration of a pollutant to rank the control technologies. However, at this step of each BACT analysis in this section, Trinity did not rank the remaining control options under any of the following scenarios:

- If there is only one remaining feasible control option;
- If all of the remaining feasible control options could achieve equivalent control efficiencies; or
- If all of the remaining feasible control options are selected as BACT.

3.2.4 Step 4 – Evaluate Most Effective Controls and Document Results

Beginning with the most efficient control option in the ranking, detailed economic, energy, and environmental impact evaluations are performed. If a control option is determined to be economically feasible without adverse energy or environmental impacts, it is not necessary to evaluate the remaining options with lower control efficiencies.

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[9] U.S. EPA. *Draft New Source Review Workshop Manual*, Chapter B,. Research Triangle Park, North Carolina. October 1990.
[10] U.S. EPA, *New Source Review Workshop Manual: Permitting of Significant Deterioration and Nonattainment Area Permitting*, Oct. 1990, pg. B.13. Available at: https://www.epa.gov/sites/default/files/2015-07/documents/1990wman.pdf. Accessed July 2022.
[11] U.S. EPA Environmental Appeals Board decision, *In Re Hillman Power Company, L.L.C.*, PSD Appeal Nos. 02-04, 02-05, and 02-06, Order Denying Review, July 31, 2002, pgs. 691-692. Available at: https://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/Decision~Date/55840631BCCE7E4185257069005F7D86/$File/hillman.pdf. Accessed July 2022.

The economic evaluation focuses on the cost effectiveness of the control option. Costs of installing and operating control technologies are estimated and annualized following the methodologies outlined in the U.S. EPA's *OAQPS Control Cost Manual* (CCM) and other industry resources.[12,13]

3.2.5 Step 5 – Select BACT

In the final step, one pollutant-specific control option is proposed as BACT for each emission unit under review based on evaluations from the previous step. As provided in the subsequent sections of this BACT analysis, the proposed BACT limits, either concentration-based or mass-based, conform with the RBLC database search results from Step 1.

The U.S. EPA has consistently interpreted the statutory and regulatory BACT definitions as containing two core requirements that the agency believes must be met by any BACT determination, regardless of whether the "top-down" approach is used. First, the BACT analysis must include consideration of the most stringent available control technologies, i.e., those which provide the "maximum degree of emissions reduction." Second, any decision to require a lesser degree of emissions reduction must be justified by an objective analysis of "energy, environmental, and economic impacts."

3.3 BACT ANALYSIS REQUIREMENT

Based on the PSD Analysis detailed in Section 2.2 of this application, the proposed Moss Lake Compressor Station will trigger PSD review for PM_{10}, $PM_{2.5}$, NO_X, CO, VOC, and GHGs (CO_2e). Thus, BACT must be determined for each new emission unit from which these pollutants are emitted. The top-down BACT analysis performed has been summarized in Table 3-1 for the emission sources and their respective pollutants.

Table 3-1. Sources Requiring a BACT Analysis

Emission Unit	Emission Unit Descriptions	Pollutant Requiring BACT [1]	Group
All ASCCTs	Aeroderivative Simple Cycle Combustion Turbines 1 through 5	PM_{10}, $PM_{2.5}$, NO_X, CO, VOC, GHG	Simple Cycle Stationary Gas Turbines
All EGENs	Emergency Generators 1 through 5	PM_{10}, $PM_{2.5}$, NO_X, CO, VOC, GHG	IC Engines
TK01	Condensate Storage Tank	VOC	Storage Tank
FUG01	Equipment Leaks	VOC, GHG	Fugitives

[1] Unless otherwise specified, GHG includes CO_2, CH_4, and N_2O.

[12] U.S. EPA, Office of Air Quality Planning and Standards (OAQPS), *EPA Air Pollution Control Cost Manual*, Sixth Edition, EPA 452-02-001, Daniel C. Mussatti & William M. Vatavuk, Jan. 2002. Available at: https://www3.epa.gov/ttn/ecas/docs/c_allchs.pdf. Accessed July 2022.

[13] U.S. EPA, Office of Air Quality Planning and Standards (OAQPS), *EPA Air Pollution Control Cost Manual*, Seventh Edition. Available at: https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution#cost%20manual. Jan. 2021. Accessed July 2022.

3.4 AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINES (ASCCT)

This section addresses BACT for emissions of NO_X, CO, PM, PM_{10}, $PM_{2.5}$, VOC, and GHGs generated from the five ASCCTs due to the combustion of natural gas. A search of the RBLC database was conducted for the last 10 years for turbines of various sizes and applications and is provided in Appendix D.

3.4.1 NO_X BACT Analysis for the ASCCTs

In all types of combustion processes, NO_X can be formed via three mechanisms, as discussed below:[14]

- ***Thermal NOx***: Thermal NO_X emissions are controlled by the nitrogen and oxygen molar concentrations and the combustion temperature. Combustion at temperatures less than 2,370°F forms much smaller concentrations of thermal NO_X;
- ***Fuel NOx***: Fuel NO_X emissions are created from combustion of fuel that contains nitrogen that results from oxidation of the already-ionized nitrogen contained in the fuel; and
- ***Prompt NOx***: Prompt NO_X is formed from molecular nitrogen in the air combining with fuel in fuel-rich conditions, which exist, to some extent, in all combustion scenarios.

The proposed ASCCTs will be subject to 40 C.F.R. Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines. Each ASCCT will have a maximum heat input rating, based on the firing of fuel gas (HHV), of approximately 294 MMBtu/hr. In accordance with 40 C.F.R. Part 60 Subpart KKKK, each turbine must meet the applicable NO_X emission limit established in Table 1 to 40 C.F.R. Part 60 Subpart KKKK.

Per 40 C.F.R. § 60.4320 for high load operations (>=75 Percent load), the following NO_X emission limitation applies:

- 25 ppm at 15 percent oxygen; or
- 150 ng/J of useful output (1.2 lb/MWh).

Per Table 1 of 40 C.F.R. Part 60 Subpart KKKK, for turbines (<= 30 MW output) operating at less than 75 Percent of peak load, the following NO_X emission limitation applies:

- 150 ppm at 15 percent oxygen; or
- 1,100 ng/J of useful output (8.7 lb/MWh).

The following technologies were identified in the RBLC search results and available literature (see Appendix D) as potentially applicable for controlling NO_X emissions from the turbines:

- Water/Steam Injection;
- Dry Low-NO_X Combustor Design or SOLONOx;
- Catalytic Combustion Controls (XONON™);
- Selective Non-Catalytic Reduction (SNCR);
- Non-Selective Catalytic Reduction (NSCR);
- Selective Catalytic Reduction (SCR);
- EMx™ (formerly referred to as SCONOx™); and
- Good Combustion Practices.

[14] See also U.S. EPA, Office of Air Quality Planning and Standards (OAQPS), *Nitrogen Oxides (NOx): Why and How They Are Controlled*, EPA 456/F-99-006R. Research Triangle Park, North Carolina. November 1999. Available at: https://www3.epa.gov/ttncatc1/dir1/fnoxdoc.pdf. Accessed July 2022.

The top-down BACT analysis for NO_X from combustion turbines is presented in Table 3-2 below.

Table 3-2. Aeroderivative Simple Cycle Combustion Turbines - Top-Down BACT Analysis for NO_X

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Aeroderivative Simple Cycle Combustion Turbines 1 through 5 (ASCCT1 through ASCCT5)	NO_X	Water/Steam Injection	Water/Steam injection technology has been demonstrated to effectively lower NO_X emissions from gas turbines. The water injection increases the thermal mass by dilution, thereby reducing the peak temperatures in the flame zone. Steam injection employs the same mechanisms to reduce the peak flame temperature with the exclusion of heat absorbed due to vaporization because the heat of vaporization has been added to the steam prior to injection. In addition, the latent heat of vaporization is absorbed from the flame zone, which reduces the NO_X formation due to combustion.[1]	**Feasible**. It is important to note that increasing the rate of water/steam injection has proven to be detrimental to turbine part lives and cycle performance. Additionally, at high rates of water/steam injection, the emissions of CO and VOC will increase significantly.	3 (~25 ppmv @ 15% O_2) [6]	Higher ranked control technologies selected as BACT. No further analysis is required.	N/A
		Dry Low-NOx Combustor Design or SOLONOx	Gas turbines using staged combustion are referred to as Dry Low-NO_X combustors. This technology will either lower the combustor temperature using lean mixtures of air and/or fuel staging, or decrease the residence time for the combustor. Two-stage lean/lean combustors are essentially fuel-staged, premixed combustors in which each stage burns lean. This configuration allows the turbine to operate with a significantly lean mixture and ensures a stable flame. Low NO_X emissions result through cooler flame temperatures associated with lean combustion and avoidance of localized "hot spots" by premixing the fuel and air. Two stage rich/lean combustors are essentially air-staged, premixed combustors in which the primary zone is operated fuel rich and the secondary zone is operated fuel lean.[1] Current Dry Low-NO_X combustor technology can typically achieve NO_X concentrations of 25 ppmvd or less using natural gas fuel, depending on the vendor.	**Feasible.**	2 (~9 to 15 ppmv @ 15% O_2) [6]	N/A	**Selected as BACT**
		Catalytic Combustion Controls (XONON™)	Catalytic combustion technology is potentially capable of reducing NO_X emissions from gas turbines. However, based on vendor literature, this technology is only available for turbines smaller than those proposed for the Moss Lake Compressor Station.	**Infeasible**. Based on vendor literature, catalytic combustion is not commercially available for turbines of the size proposed for the Moss Lake Compressor Station.	N/A	N/A	N/A
		Selective Non-Catalytic Reduction (SNCR)	Selective Non-Catalytic Reduction achieves NOx emissions reductions via the injection of ammonia or urea into specific temperature zones in the exhaust gas. SNCR requires a higher operating temperature than SCR, sufficient residence time in the exhaust gas within a specific temperature range, and does not use a catalyst. The operating temperature range required for effective operation is 1,600°F to 2,100°F.[3]	**Infeasible.** The exhaust temperature of the proposed turbines (~988°F) is below the required temperature for using this technology.	N/A	N/A	N/A
		Non-Selective Catalytic Reduction (NSCR)	In non-selective catalytic reduction (NSCR) systems (also referred to as three-way catalysts), a catalyst is used to control NO_X and CO emissions under fuel-rich (less than 3-percent oxygen) conditions. It is effective only with rich burn engines that are capable of a simultaneous reduction of NO_X, CO, and unburned hydrocarbons in a single catalyst due to the stoichiometric nature of the combustion process.[4]	**Infeasible.** The oxygen concentration in the exhaust of typical gas-fired turbines is 15 percent due to the lean burn nature of gas-fire turbines.[5] To successfully remove NO_X, the exhaust stream must contain less than 0.5 percent oxygen upstream of the catalyst.[4] Since the oxygen concentration in the turbine exhaust stream is outside the design range of an NSCR system, this control technology is eliminated as BACT for NO_X.	N/A	N/A	N/A
		Selective Catalytic Reduction (SCR)	SCR reduces NO_X emissions by injecting ammonia into the exhaust gas stream upstream of a catalyst. Nitrogen oxides, ammonia, and oxygen react on the surface of the catalyst to form nitrogen and water.[1]	**Feasible.**	1 (~2.5 to 5 ppmv @ 15% O_2) [6]	**Economically Infeasible** [7]	N/A
		EMx™	EMx™ (formerly referred to as SCONOx™) is a post-combustion technology that utilizes a proprietary oxidation catalyst and absorption technology using a single catalyst (potassium carbonate) for removal of NO_X, CO, and VOCs without the use of ammonia. While EMx™ achieves permitted NO_X emission levels, it is a challenge to operate due to high operating expenses and maintenance issues.	**Infeasible**. This technology has been successfully installed on small gas-fired turbines, sized from 5 to 45 MW.[2] However, according to the US EPA, EMx™ systems operate at temperatures ranging from 300 °F to 700 °F.[5] During normal operation, the exhaust temperature from the aeroderivative turbines is approximately 988°F which exceeds the maximum design range for EMx™; therefore, this technology is eliminated.	N/A	N/A	N/A

Table 3-2. Aeroderivative Simple Cycle Combustion Turbines - Top-Down BACT Analysis for NO_X

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Aeroderivative Simple Cycle Combustion Turbines (ASCCT1 through ASCCT5)	NOx	Good Combustion Practices	Good combustion practices including good equipment design, use of gaseous fuels for good mixing, and proper combustion techniques such as optimizing the air to fuel ratio.	**Feasible.**	4 (N/A) [6]	N/A	**Selected as BACT**

[1] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 3.1, Stationary Gas Turbines, Apr. 2000.

[2] EmeraChem. "Multi-Pollutant Emission Reduction Technology For Stationary Gas Turbines and IC Engines," Jan. 5, 2004.

[3] U.S. EPA, *Air Pollution Control Technology Fact Sheet*, EPA-452/F-03-031. Available at: https://www3.epa.gov/ttncatc1/dir1/fsncr.pdf. Accessed July 2022.

[4] Sasadeusz, L. and Arney, G. "Operating Catalytic Emission Reduction Systems." Presentation for Gas/Electric Partnership 2008 Workshop, Houston, TX, January 30-31, 2008 (hereinafter "Gas/Electric Partnership 2008 Workshop").

[5] U.S. EPA, Combined Heat and Power Partnership, Catalog of CHP Technologies, Section 3. Technology Characterization – Combustion Turbines. Available at: https://www.epa.gov/sites/production/files/2015-07/documents/catalog_of_chp_technologies_section_3._technology_characterization_-_combustion_turbines.pdf. Accessed July 2022.

[6] Values are based on RBLC database search results provided in Appendix D and Vendor Data.

[7] Refer to Appendix E Table E-2 for detailed cost analysis.

NO_X BACT Evaluation Summary for the ASCCTs

As discussed in Table 3-2, the following NO_X control technologies are proposed as BACT:

- Dry Low-NO_X Combustor Design; and
- Good Combustion Practices.

During periods of maintenance, startup, and shutdown (MSS), NOx BACT for the ASCCTs is based on the vendor provided emission estimates associated with the startup and shutdown activities. The Dry Low-NO_X combustor design will control NO_X emissions upon the turbine reaching the required optimum operating condition. Thus, during MSS, emissions will be controlled with good combustion practices, which involve ensuring proper operation and maintenance of the turbines.

A summary of the proposed NO_X BACT emission limitations for each ASCCT is provided in Table 3-3.

Table 3-3. Proposed NO_X BACT Emission Limits for Aeroderivative Simple Cycle Combustion Turbines

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Aeroderivative Simple Cycle Combustion Turbines (ASCCT1 through ASCCT5)	Good Combustion Practices	16.20 lb/hr	Max Hourly	Vendor Data	Normal/MSS
	Dry Low-NO_X Combustor Design and Good Combustion Practices	14.6 ppmv @ 15% O_2	30-Day Rolling Average		Normal

3.4.2 CO BACT Analysis for the ASCCTs

CO emissions from the ASCCTs will primarily be the result of incomplete combustion. Specifically, factors affecting CO emissions include firing temperatures, residence time in the combustion zone, and combustion chamber mixing characteristics. The ASCCTs are not subject to any federal or state CO standards; thus, baseline CO emissions are the uncontrolled emissions.

The following technologies were identified in the RBLC search results and available literature (see Appendix D) as potentially applicable for controlling CO emissions from the ASCCTs:

- Combustion Process Design and Good Combustion Practices;
- Oxidation Catalyst; and
- EMx™ (formerly referred to as SCONOx™).

The top-down BACT analysis for CO from the proposed ASCCTs is provided in Table 3-4.

Table 3-4. Aeroderivative Simple Cycle Combustion Turbines - Top-Down BACT Analysis for CO

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Aeroderivative Simple Cycle Combustion Turbines 1 through 5 (ASCCT1 through ASCCT5)	CO	Combustion Process Design and Good Combustion Practices	To minimize incomplete combustion and the resulting formation of CO, this control technology includes proper equipment design, proper operation, and good combustion practices. Proper equipment design is important in minimizing incomplete combustion by allowing for sufficient residence time at high temperature as well as turbulence to mitigate incomplete mixing. Proper operation and good combustion practices provide additional CO control via the use of gaseous fuels for good mixing and proper combustion techniques such as optimizing the air to fuel ratio.	**Feasible**.	N/A	N/A	**Selected as BACT**
		Oxidation Catalyst	Oxidation Catalyst control technology utilizes a catalyst to oxidize CO at lower temperatures. The addition of a catalyst to the basic thermal oxidation process accelerates the rate of oxidation by adsorbing oxygen from the air stream and CO in the waste stream onto the catalyst surface to react to form CO_2 and H_2O.	**Infeasible.** Oxidation Catalyst systems are typically used on equipment with exhaust gas temperatures ranging from approximately 600°F to 800°F. [1] The exhaust temperature from these turbines is approximately 988°F. Thus, the effective temperature range for Oxidation Catalyst is outside of the operating parameters for the turbine exhaust. Despite technical infeasibility, a cost analysis was conducted for further evaluation.	N/A	**Economically Infeasible**[3] Although technically infeasible, the cost analysis was performed as a conservative approach.	N/A
		EMx™	EMx™ (formerly referred to as SCONOx™) is a post-combustion technology that utilizes a proprietary oxidation catalyst and absorption technology using a single catalyst (potassium carbonate) for removal of NO_x, CO, and VOCs without the use of ammonia. While EMx™ achieves permitted NO_x emission levels, it is a challenge to operate due to high operating expenses and maintenance issues.	**Infeasible**. This technology has been successfully installed on small natural gas-fired turbines, sized from 5 to 45 MW.[2] However, according to the US EPA, EMx™ systems operate at temperatures ranging from 300 °F to 700 °F.[4] During normal operation, the exhaust temperature from the aeroderivative turbines is approximately 988°F which exceeds the maximum design range for EMx™; therefore, this technology is eliminated.	N/A	N/A	N/A

[1] EPA Air Pollution Control Technology Fact Sheet, EPA-452/F-03-018.

[2] EmeraChem. "Multi-Pollutant Emission Reduction Technology For Stationary Gas Turbines and IC Engines," January 5, 2004.

[3] Refer to Table E-3 of Appendix E for detailed cost analysis.

[4] U.S. EPA, Combined Heat and Power Partnership, *Catalog of CHP Technologies*, Section 3. Technology Characterization – Combustion Turbines. Available at: https://www.epa.gov/sites/production/files/2015-07/documents/catalog_of_chp_technologies_section_3._technology_characterization_-_combustion_turbines.pdf. Accessed July 2022.

CO BACT Evaluation Summary for the ASCCTs

Combustion process design and good combustion practices represent the proposed BACT for CO.

During periods of MSS, CO BACT for the ASCCTs is based on the vendor provided emission estimates associated with the startup and shutdown activities. The duration of each startup and shutdown event is expected to occur 12 and 8 minutes per event, respectively. During MSS, emissions will be controlled with good combustion practices, which involve proper operation and maintenance of the turbines.

The proposed CO BACT emission limits for the ASCCTs are shown in Table 3-5.

Table 3-5. Proposed CO BACT Emission Limits for Aeroderivative Simple Cycle Combustion Turbines

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Aeroderivative Simple Cycle Combustion Turbines 1 through 5 (ASCCT1 through ASCCT5)	Good Combustion Practices	24.10 lb/hr	Max Hourly	Vendor Data	Normal/MSS
	Proper Equipment Design, Proper Operation, and Good Combustion Practices	36 ppmv @ 15% O_2	30-Day Rolling Average		Normal

3.4.3 $PM/PM_{10}/PM_{2.5}$ BACT Analysis for the ASCCTs

Natural gas particulate emissions are primarily products of incomplete combustion of natural gas fuel in the combustion chamber. These particulate emissions contain a mixture of soot, sulfates, dust, inorganic metals, trace metals, and a soluble organic fraction (SOF) that is composed of lube oil-derived hydrocarbons and unburned natural gas fuel. The proposed combustion turbines will exclusively combust natural gas. Particulates formed by natural gas combustion are less than 1 micrometer in size[15]. For this reason, the control technology assessment for PM, PM_{10}, and $PM_{2.5}$ will be considered the same for the combustion turbines.

The ASCCTs are not subject to any federal PM, PM_{10}, and/or $PM_{2.5}$ emission standards. Regarding state emission standards, which are approved as part of the federally enforceable State Implementation Plan, the ASCCTs are subject to LAC 33:III.1311.C and LAC 33:III.1313.C which prohibit greater than 20 Percent opacity for more than one six-minute period in any 60 consecutive minutes and PM emissions in excess of 0.6 lb/MMBtu, respectively.

The following technologies were identified in the RBLC search results and available literature (see Appendix D) as potentially applicable for controlling $PM/PM_{10}/PM_{2.5}$ emissions from the ASCCTs:

- Exclusive Combustion of Low Sulfur Gaseous Fuels for Improved Combustion Efficiency;
- Good Combustion Practices;
- Baghouses; and

[15] Based on Section 1.4, Natural Gas Combustion, U.S. EPA, AP-42, Fifth Edition, Volume 1, July 1998.

- Electrostatic Precipitator.

The top-down BACT analysis for $PM/PM_{10}/PM_{2.5}$ from the proposed ASCCTs is provided in Table 3-6.

Table 3-6. Aeroderivative Simple Cycle Combustion Turbines - Top-Down BACT Analysis for PM/PM_{10}/$PM_{2.5}$

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Aeroderivative Simple Cycle Combustion Turbines 1 through 5 (ASCCT1 through ASCCT5)	PM/PM_{10}/$PM_{2.5}$	Exclusive Combustion of Low Sulfur Gaseous Fuels for Improved Combustion Efficiency	Particulate emissions from gas-fired turbines are minimal because gas fuels have low ash content.[1] Natural gas has low sulfur contents as pipeline quality natural gas typically has a sulfur content of 2,000 grains per million cubic feet.[2] Low sulfur content results in lower particulate emissions.	**Feasible**.	N/A	N/A	**Selected as BACT**
		Good Combustion Practices	Good combustion practices including good equipment design, use of gaseous fuels for good mixing, and proper combustion techniques such as optimizing the air to fuel ratio.	**Feasible**.	N/A	N/A	**Selected as BACT**
		Baghouses (Fabric Filters)	In a fabric filter, flue gas is passed through a tightly woven or felted fabric, causing PM in the flue gas to be collected on the fabric by sieving and other mechanisms. The dust cake that forms on the filter from the collected PM will further increase the collection.[3]	**Infeasible**. PM emissions from combustion of gaseous fuels contains particulates less than 1 μm.[2] However, the standard baghouse is designed to collect particulates greater than 1 μm.[5] Therefore, this technology is not applicable to this source type and is considered infeasible.	N/A	N/A	N/A
		Electrostatic Precipitator (ESP)	An ESP is a particulate control device that uses electrical forces to move particles entrained within an exhaust stream onto collector plates. The entrained particles are given an electrical charge when they pass through a corona, a region where gaseous ions flow. Electrodes in the center of the flow lane are maintained at high voltage and generate the electrical field that forces the particles to the collector walls.[4]	**Infeasible**. Typical inlet PM concentrations to ESPs are 1 to 50 gr/ft^3.[4] The inlet PM concentration from the proposed turbines is significantly less than this range and therefore outside the typical design range. In addition, ESPs are typically used in coal, oil, wood, or liquid waste fired combustion units, or in the metals processing facilities.[4] Therefore, this technology is not applicable to this source type and is considered infeasible.	N/A	N/A	N/A

[1] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 3.1, Stationary Gas Turbines, April 2000.

[2] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 1.4, Natural Gas Combustion, July 1998.

[3] U.S. EPA, *Air Pollution Control Technology Fact Sheet*, EPA-452/F-03-024. Available at: https://www3.epa.gov/ttncatc1/dir1/ff-shaker.pdf. Accessed July 2022.

[4] U.S. EPA, *Air Pollution Control Technology Fact Sheet*, EPA-452/F-03-028. Available at: https://www3.epa.gov/ttn/catc/dir1/fdespwpl.pdf. Accessed July 2022.

[5] Bethea, R.M. "Air Pollution Control Technology: An Engineering Analysis Point of View." Van Norstrand Reinhold (1978).

$PM/PM_{10}/PM_{2.5}$ BACT Evaluation Summary for the ASCCTs

As detailed in Table 3-7, BACT is proposed to be the exclusive use of low sulfur gaseous fuel and good combustion practices. A summary of the proposed $PM/PM_{10}/PM_{2.5}$ BACT emission limitations for each ASCCT is provided in Table 3-7.

Table 3-7. Proposed $PM/PM_{10}/PM_{2.5}$ BACT Emission Limits for Aeroderivative Simple Cycle Combustion Turbines

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Aeroderivative Simple Cycle Combustion Turbines 1 through 5 (ASCCT1 through ASCCT5)	Exclusive Combustion of Low Sulfur Gaseous Fuel and Good Combustion Practices	5.03 lb/hr	Max Hourly	Vendor Data	Normal/MSS

3.4.4 VOC BACT Analysis for the ASCCTs

VOCs are formed due to incomplete combustion of the fuel in the combustion chamber and depends in varying degrees on the extent of fuel mixing, resulting air-to-fuel ratios, combustion temperature, and residence time. The majority of the VOCs in the exhaust is the result of unburned fuel, although some is formed as combustion products. Turbine operating conditions such as load and injection timing play a role in the formation of VOC emissions from the ASCCTs. The ASCCTs will not be subject to any federal or state regulations that establish VOC emission limits. As such, the uncontrolled emissions from each ASCCT will be the baseline VOC emissions.

The following technologies were identified in the RBLC search results and available literature (see Appendix D) as potentially applicable for controlling VOC emissions from the ASCCTs:

- Oxidation Catalyst;
- Combustion Process Design and Good Combustion Practices; and
- EMx™ (formerly referred to as SCONOx™).

The top-down BACT analysis for VOC is presented in Table 3-8 below.

Table 3-8. Aeroderivative Simple Cycle Combustion Turbines - Top-Down BACT Analysis for VOC

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Aeroderivative Simple Cycle Combustion Turbines 1 through 5 (ASCCT1 through ASCCT5)	VOC	Oxidation Catalyst	The use of an Oxidation Catalyst is a post-combustion technology wherein the products of combustion are introduced to a catalytic bed at the appropriate temperature point in the Waste Heat Recovery Unit. The catalyst promotes the oxidation of VOC as well as CO, reducing emissions of both. Such systems typically achieve a maximum VOC removal efficiency in the range of 20 to 50 percent.	**Infeasible**. Oxidation Catalyst systems are typically used on equipment with exhaust gas temperatures ranging from approximately 600°F to 800°F.[1] The exhaust temperature from these turbines in simple cycle mode is approximately 988°F. Thus, the effective temperature range for Oxidation Catalyst is outside of the operating parameters for the turbine exhaust. Despite of technical infeasibility, a cost analysis was conducted for further evaluation.	N/A	**Economically Infeasible** [2] Although technically infeasible, the cost analysis was performed as a conservative approach.	N/A
		Combustion Process Design and Good Combustion Practices	To minimize incomplete combustion and the resulting formation of VOC, this control technology includes proper equipment design, proper operation, and good combustion practices. Proper equipment design is important in minimizing incomplete combustion by allowing for sufficient residence time at high temperature as well as turbulence to mitigate incomplete mixing. Proper operation and good combustion practices provide additional VOC control via the use of gaseous fuels for good mixing and proper combustion techniques such as optimizing the air to fuel ratio.	**Feasible**.	N/A	N/A	**Selected as BACT**
		EMx™	EMx™ (formerly referred to as SCONOx™) is a post-combustion technology that utilizes a proprietary oxidation catalyst and absorption technology using a single catalyst (potassium carbonate) for removal of NO_x, CO, and VOCs without the use of ammonia. While EMx™ achieves permitted NO_x emission levels, it is a challenge to operate due to high operating expenses and maintenance issues.	**Infeasible**. This technology has been successfully installed on small gas-fired turbines, sized from 5 to 45 MW.[3] However, according to the US EPA, EMx™ systems operate at temperatures ranging from 300°F to 700°F.[4] During normal operation, the exhaust temperature from the aeroderivative turbines is approximately 988°F which exceeds the maximum design range for EMx™; therefore, this technology is eliminated.	N/A	N/A	N/A

[1] U.S. EPA, *Air Pollution Control Technology Fact Sheet*, EPA-452/F-03-018. Available at: https://www3.epa.gov/ttnchie1/mkb/documents/fcataly.pdf. Accessed July 2022.

[2] Refer to Table E-4 of Appendix E for detailed cost analysis.

[3] EmeraChem. "Multi-Pollutant Emission Reduction Technology For Stationary Gas Turbines and IC Engines," Jan. 5, 2004.

[4] U.S. EPA Combined Heat and Power Partnership, Catalog of CHP Technologies, Section 3. Technology Characterization – Combustion Turbines. Available at: https://www.epa.gov/sites/production/files/2015-07/documents/catalog_of_chp_technologies_section_3._technology_characterization_-_combustion_turbines.pdf. Accessed July 2022.

VOC BACT Evaluation Summary for the ASCCTs

As provided in Table 3-8, VOC BACT for the ASCCTs is proposed as combustion process design and good combustion practices, including combustion of gaseous fuels.

During periods of MSS, VOC BACT for the ASCCTs is based on the vendor provided emission estimates associated with the startup and shutdown activities. The duration of each startup and shutdown event is expected to occur 12 and 8 minutes per event, respectively. During MSS, emissions will be controlled with good combustion practices, which involve proper operation and maintenance of the turbines.

Refer to Table 3-9 for the proposed VOC emission limits for each ASCCT.

Table 3-9. Proposed VOC BACT Emission Limits for Aeroderivative Simple Cycle Combustion Turbines

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Aeroderivative Simple Cycle Combustion Turbines 1 through 5 (ASCCT1 through ASCCT5)	Good Combustion Practices	5.83 lb/hr	Max Hourly	Vendor Data	Normal/MSS
	Combustion Process Design, Combustion of Gaseous Fuel and Good Combustion Practices	15.2 ppmv @ 15% O_2	30-Day Rolling Average		Normal

3.4.5 GHG BACT Analysis for the ASCCTs

For PSD permitting purposes, GHGs are considered to be a single air pollutant (i.e., CO_2e), comprised of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). GHG emissions from a natural gas-fired turbine are due to the combustion of the natural gas and are directly correlated with the amount of fuel burned. Therefore, the less fuel burned per unit of energy produced or greater energy efficiency established, the lower GHG emissions.

For the ASCCTs, there are no federal or state requirements, which establish GHG emission standards. Thus, the uncontrolled emissions from the ASCCTs are the baseline CO_2e emissions.

The following technologies were identified in the RBLC search results and available literature (see Appendix D) as potentially applicable for controlling GHG emissions from the ASCCTs:

- Exclusively Combust Low Carbon Gaseous Fuel;
- Good Combustion Practices;
- Proper O&M Practices;
- Insulation Properly Implemented for Surface Above 120°F; and
- Carbon Capture and Sequestration/Storage.

The top-down BACT analysis for GHG is presented in Table 3-10 below.

Table 3-10. Aeroderivative Simple Cycle Combustion Turbines - Top-Down BACT Analysis for GHG Emissions (CO_2e)

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Aeroderivative Simple Cycle Combustion Turbines 1 through 5 (ASCCT1 through ASCCT5)	GHG (CO_2e)	Exclusively Combust Low Carbon Gaseous Fuel	Use of gaseous fuels, rather than other fossil fuels such as fuel oil or coal, results in lower GHG emissions per unit of energy output. 40 CFR Part 98, Table C-1 (U.S. EPA's Mandatory GHG Reporting Rule) lists gaseous fuel (e.g., natural gas or fuel gas) as having one of the lowest CO_2 generation rates of any of the fuels listed.	**Feasible**.	1 [2]	N/A	**Selected as BACT**
		Good Combustion Practices	Good combustion practices, including good equipment design, use of gaseous fuels for good mixing, and proper combustion techniques such as optimizing the air to fuel ratio. It also includes maintaining the proper level of oxygen in the exhaust such that combustion efficiency is maximized, resulting in reduced fuel consumption and lower GHG emissions.	**Feasible**.	1 [2]	N/A	**Selected as BACT**
		Proper O&M Practices	Implementing good O&M practices to improve the combustion efficiency of the unit. Increasing combustion efficiency reduces fuel consumption, which results in lower GHG emissions.	**Feasible.**	1 [2]	N/A	**Selected as BACT**
		Insulation Properly Implemented for Surfaces Above 120 °F	Insulation will be properly implemented for surfaces above 120 °F to prevent heat loss and improve combustion efficiency.	**Feasible**	1 [2]	N/A	**Selected as BACT**
		Carbon Capture and Sequestration/Storage (CCS)	Refer to Section 3.4.5.1 for additional information.	**Infeasible.** Refer to Section 3.4.5.1 for additional information.	N/A	**Economically Infeasible.** Refer to Section 3.4.5.1.1 [1,3]	N/A

[1] See to Table E-1 of Appendix E for detailed cost analysis.
[2] Except for CCS, all other technically feasible control technologies are assumed to achieve equivalent control efficiencies.
[3] Section 3.4.5.1 provides the CCS economic infeasibility analysis.

3.4.5.1 CCS Control Technology Description

CCS requires three separate and distinct activities: (1) separating and capturing CO_2 from a combustion unit's exhaust gas, (2) pressurizing the captured CO_2 and transporting the compressed CO_2 for injection, and (3) injecting the CO_2 into an available and permanent geologic storage structure. ***If any one of the three CCS activities is unavailable or technically infeasible, CCS is not viable as BACT for the ASCCTs***.

Step 1: Capture of CO_2:
There are three different types of CO_2 capture systems: post-combustion, pre-combustion, and oxyfuel combustion. The important factors to select the appropriate CO_2 capture system are the concentration of CO_2 in the gas stream, the pressure of the gas stream, and the fuel type (solid or fuel).

- Post-combustion capture system
  - Post-combustion capture system separates CO_2 from the flue gases produced by the combustion of the primary fuel in air. Typically, these systems use a liquid solvent to capture the small fraction of CO_2 (3 percent by volume to 15 percent by volume) present in the flue gas stream in which the main constituent is nitrogen. These systems would typically use an organic solvent such as monoethanolamine (MEA) to separate CO_2 from the flue gas stream.[16]
- Pre-combustion Capture
  - The first stage of a pre-combustion capture process reaction produces a mixture of hydrogen and carbon monoxide (syngas) from the primary fuel. This reaction can be achieved by either "steam reforming" or "partial oxidation" based on the primary fuel (gaseous, solid, and liquid fuels). CO_2 is removed from the CO/H_2 mixture by the "shift" reaction by the addition of steam (waste gas shift reaction).[17]
- Oxy-combustion Capture
  - The oxy-fuel combustion process eliminates nitrogen from the flue gas by combusting a hydrocarbon or carbonaceous fuel in either pure oxygen or a mixture of pure oxygen and a CO_2-rich recycled flue gas. The flue gas consists mainly of CO_2 and water vapor together with excess oxygen required to ensure complete combustion of the fuel. The flue gas, after cooling to condense water vapor, contains about 80 percent to 98 percent CO_2 depending on the fuel used. This concentrated CO_2 stream can be compressed, dried and further purified before delivery into a pipeline for storage.[18]

Step 2: Transport of CO_2:
CO_2 can be transported in three states: gas, liquid, and solid. Typically, commercial-scale transport uses tanks, pipelines, and ships for gaseous and liquid CO_2. Gaseous CO_2 transported at atmospheric pressure occupies a large volume. Therefore, gaseous CO_2 must be compressed, and compressed CO_2 is then transported by pipeline. The volume of CO_2 can be further reduced by liquefaction, solidification or hydration for transportation.

Step 3: Storage of CO_2:
CO_2 storage potentially can be accomplished by

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[16] Intergovernmental Panel on Climate Change, "Carbon Dioxide Capture and Storage", 2005, p. 25. Available at https://www.ipcc.ch/site/assets/uploads/2018/03/srccs_wholereport-1.pdf. Accessed July 2022.
[17] *Ibid.*
[18] *Ibid.*

- Underground geological storage;
- Ocean storage;
- Mineral carbonation; and
- Industrial uses of CO_2 such as Enhanced Oil Recovery (EOR) fields.

3.4.5.1.1 CCS BACT Evaluation of ASCCTs

CP Express evaluated the CCS control technology for CO_2 emissions control from the ASCCTs. The technical feasibility and the economic impact assessment are discussed below.

Technical Feasibility Analysis:

The determination of technical feasibility of CCS is highly dependent upon the nature of the source and there may be different feasibility analysis for each of the three elements – capture, compression, and storage/sequestration. EPA previously provided guidance on the feasibility of CCS in a project. The 2011 U.S. EPA guidance for PSD and Title V Permitting of Greenhouse Gases (GHG Guidance)[19] states:

> *"For the purposes of a BACT analysis for GHGs, EPA classifies CCS as an add-on pollution control technology that is 'available' for facilities emitting CO2 in large amounts, including fossil fuel-fired power plants, and for industrial facilities with high-purity CO2 streams (e.g., hydrogen production, ammonia production, natural gas processing, ethanol production, ethylene oxide production, cement production, and iron and steel manufacturing). For these types of facilities, CCS should be listed in Step 1 of a top-down BACT analysis for GHGs."*

Note that the "*industrial facilities with high-purity CO_2 stream*" identified in the U.S. EPA guidance document refers to process streams and process vent streams that contain substantially higher CO_2 concentrations than expected from the exhaust stream of the natural gas-fired turbines. None of those "*high-purity CO_2 streams*" mentioned in GHG Guidance is generated from combustion of a natural gas. Typically, the flue gas from a natural gas fired turbines contains approximately 4.1 percent of CO_2.[20] Based on the data provided by the vendor, the exhaust flue gas from the proposed ASCCTs contains approximately 3.4 percent of CO_2.[21] Because the exhaust gas from a natural gas-fired ASCCT contains a very low percentage of CO_2, capturing CO_2 from this stream is technically challenging.[22] Additionally, the exhaust gas from a natural gas-fired ASCCT will have higher oxygen concentrations, which leads to degradation of the solvents.[23]

EPA studied and identified these technical barriers for the application of CCS on natural gas-fired turbines. On January 8, 2014, EPA published a NSPS proposed rule for the control of CO_2 for new fossil fuel-fired electric generating units ("New Unit EGU NSPS"), which was finalized on October 23, 2015 (80 Fed. Reg. 64,510). As part of the rulemaking process, EPA conducted the best system of emission

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[19] U.S. EPA, PSD and Title V Permitting Guidance for Greenhouse Gases, March 2011. Available at: https://www.epa.gov/sites/default/files/2015-07/documents/ghgguid.pdf. Accessed July 2022.

[20] U.S. Department of Energy, National Energy Technology Laboratory. "Cost and Performance Baseline for Fossil Energy Plants, Volume 1: Bituminous Coal and Natural Gas to Electricity", September 24, 2019, NETL-PUB-22638. Available at: https://www.netl.doe.gov/projects/files/CostAndPerformanceBaselineForFossilEnergyPlantsVol1BitumCoalAndNGtoElectBBRRev4-1_092419.pdf. Accessed July 2022.

[21] Based on vendor data (July 2021).

[22] U.S. Department of Energy, Quadrennial Technology Review 2015, Carbon Dioxide Capture for Natural Gas and Industrial Applications, Chapter 4: Technology Assessment. Available at: https://www.energy.gov/sites/default/files/2015/12/f27/QTR2015-4D-Carbon-Dioxide-Capture-for-Natural-Gas-and-Industrial-Applications.pdf. Accessed July 2022.

[23] *Ibid.*

reduction ("BSER") analysis for natural gas-fired turbines. In this rulemaking, EPA concluded that CCS was not technically feasible for Natural Gas Combined Cycle (NGCC) plants, stating as follows:[24]

> *We considered two alternatives in evaluating the BSER for new fossil fuel-fired stationary combustion turbines: (1) modern, efficient NGCC units and (2) modern, efficient NGCC units with CCS. NGCC units are the most common type of new fossil fuel-fired units being planned and built today. The technology is in wide use. Nearly all new fossil fuel-fired EGUs being constructed today are using this advanced, efficient system for generating intermediate and base load power. Importantly, NGCC is an inherently lower CO_2-emitting technology. Almost every natural gas-fired stationary combined cycle unit built in the U.S. in the last five years emits approximately 50 percent less CO_2 per MWh than a typical new coal-fired plant of the same size. The design is technically feasible, and evidence shows that NGCC units are currently the lowest-cost, most efficient option for new fossil fuel-fired power generation.*
>
> *NGCC with CCS is not a configuration that is being built today. The EPA considered whether NGCC with CCS could be identified as the BSER adequately demonstrated for new stationary combustion turbines, and we decided that it could not. At this time, CCS has not been implemented for NGCC units, and we believe there is insufficient information to make a determination regarding the technical feasibility of implementing CCS at these types of units.*
>
> * * *
>
> *The EPA is not aware of any demonstrations of NGCC units implementing CCS technology that would justify setting a national standard. Further, the EPA does not have sufficient information on the prospects of transferring the coal-based experience with CCS to NGCC units. In fact, CCS technology has primarily been applied to gas streams that have a relatively high to very high concentration of CO_2 (such as that from a coal combustion or coal gasification unit). The concentration of CO_2 in the flue gas stream of a coal combustion unit is normally about four times higher than the concentration of CO_2 in a natural gas-fired unit. Natural gas-fired stationary combustion turbines also operate differently from coal-fired boilers and IGCC units of similar size. The NGCC units are more easily cycled (i.e., ramped up and down as power demands increase and decrease). Adding CCS to a NGCC may limit the operating flexibility in particular during the frequent start-ups/shut-downs and the rapid load change requirements. This cyclical operation, combined with the already low concentration of CO_2 in the flue gas stream, means that we cannot assume that the technology can be easily transferred to NGCC without larger scale demonstration projects on units operating more like a typical NGCC. This would be true for both partial and full capture.*

CP Express reviewed the development and implementation of the CCS control technology on natural gas-fired turbines in the US and around the world based on the National Energy Technology Laboratory's (NETL) Carbon Capture and Storage (CCS) Database and the Global CCS Institute's Facilities Database.[25] This review indicates that CO_2 capture using solvents, solid sorbents or membranes has only been used on a full-scale basis at coal-fired power plants, natural gas processing, ethanol production, chemical fertilizer plants, refineries, cement production, hydrogen production, etc., that have high concentrations of CO_2 in the flue gas.

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[24] 79 Federal Register 1430, 1436 (Jan. 8, 2014) - Standards of Performance for Greenhouse Gas Emissions from New Stationary Sources: Electric Utility Generating Units (footnotes omitted). Available at: https://www.govinfo.gov/content/pkg/FR-2014-01-08/pdf/2013-28668.pdf. Accessed July 2022.

[25] U.S. Department of Energy, National Energy Technology Laboratory, Carbon Capture and Storage Database. Available at: https://www.netl.doe.gov/carbon-management/carbon-storage/worldwide-ccs-database. Accessed July 2022.

Per NETL's CCS Database, as of April 2018 (the latest available data), none of the post-combustion CO_2 capture technologies have been demonstrated for a full-scale natural gas-fired simple cycle facilities.[26] Note that CP Express identified only one project (Masdar CCS Project, Abu Dhabi, United Arab Emirates) that is in development stage for CCS with respect to gas fired turbines in the NETL's database. The Masdar CCS Project includes capture of CO_2 from a gas-fired power plant, an aluminum smelter, and a steel mill.[27] The captured CO_2 from this project will be sold, piped, and used for EOR. Phase 1 of the project includes the capture of CO_2 from the steel mill, which is complete and operational. Phase 2 of the project include CO_2 capture from a natural gas processing plant, which is in development stage. However, this project has not yet implemented CCS technology for the gas fired power plant.[28]

Per the Global CCS Institute's Facilities Database,[29] as of June 2020 (the latest available data), none of the post-combustion CO_2 capture technologies have been demonstrated for full-scale natural gas-fired simple cycle facilities. CP Express identified only two proposed projects within the Facilities Database in advanced development, both of which have received funding from the U.S. Department of Energy.

- Plant Daniel Carbon Capture Project (Moss Point, Mississippi, United States), a proposed project to capture CO_2 using a Linde-BASF aqueous amine solvent-based post-combustion CO_2 capture technology at an existing natural gas-fired combined cycle power plant. The project is undertaking Front-End Engineering and Design (FEED) studies, including cost and schedule estimates[30]; and

- CalCapture Project (Elk Hills, California, United States), a proposed project to capture CO_2 from an existing 550-megawatt (MW) natural gas-fired combined cycle power plant which would use the CO_2 and inject the CO_2 for either storage or EOR in the co-located Elk Hills Field. The project is expected to commence FEED in the second quarter of 2022.[31]

In conclusion, globally, CO_2 capture has been implemented only on a pilot-scale basis for natural gas-fired turbines and is not yet implemented on a full-scale basis.[32,33] The New Source Review Manual[34] states:

> *"..technologies in the pilot scale testing stages of development would not be considered available for BACT review."*

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[26] U.S. Department of Energy, National Energy Technology Laboratory, Carbon Capture and Storage (CCS) Database. Available at: https://www.netl.doe.gov/coal/carbon-storage/worldwide-ccs-database. Accessed July 2022.
[27] *Ibid.*
[28] Global Carbon Capture and Storage Institute, Facilities Database. Available at: https://co2re.co/FacilityData. Accessed July 2022.
[29] *Ibid.*
[30] Southern Company, "Front End Engineering Design of Linde-BASF Advanced Post-Combustion CO_2 Capture Technology at a Southern Company Natural Gas-Fired Power Plant", August 2, 2021. Available at: https://netl.doe.gov/projects/files/Front%20End%20Engineering%20Design%20of%20Linde-BASF%20Advanced%20Post-Combustion%20CO2%20Capture%20Technology%20at%20a%20Southern%20Company%20Natural%20Gas-Fired%20Power%20Plant.pdf. Accessed July 2022.
[31] California Resources Corporation, Elk Hills Field and CalCapture CCS+ Project webpage. Available at: https://www.crc.com/our-business/where-we-operate/san-joaquin-basin/elk-hills-field. Accessed July 2022.
[32] NETL's CCS Database. Available at: https://www.netl.doe.gov/carbon-management/carbon-storage/worldwide-ccs-database. Accessed July 2022.
[33] Global Carbon Capture and Storage Institute, Facilities Database. Available at: https://co2re.co/FacilityData. Accessed July 2022.
[34] New Source Review Workshop Manual (Draft), October 1990. Available at: https://www.epa.gov/sites/default/files/2015-07/documents/1990wman.pdf. Accessed July 2022.

In order to be an "available" technology, the use of the technology must have been advanced beyond a conceptual stage and pilot tested; it must have been demonstrated to be properly functioning at full commercial scale for a reasonable period of time. The technology must have advanced beyond the point where government subsidies are needed in order to evaluate its performance and use. Because it has been implemented only on a pilot-scale basis, the capture element of CCS technology is an undemonstrated technology and cannot be considered to be "available" to control CO_2 emissions from the natural gas-fired turbines.

In addition, beyond the issues with the unavailability of demonstrated capture technology, the GHG Guidance[35] notes additional challenges associated with a CCS system as discussed below:

> *EPA recognizes the significant logistical hurdles that the installation and operation of a CCS system presents and that sets it apart from other add-on controls that are typically used to reduce emissions of other regulated pollutants and already have an existing reasonably accessible infrastructure in place to address waste disposal and other offsite needs. Logistical hurdles for CCS may include obtaining contracts for offsite land acquisition (including the availability of land), the need for funding (including, for example, government subsidies), timing of available transportation infrastructure, and developing a site for secure long term storage. . . . Based on these considerations, a permitting authority may conclude that CCS is not applicable to a particular source, and consequently not technically feasible, even if the type of equipment needed to accomplish the compression, capture, and storage of GHGs are determined to be generally available from commercial vendors.*

In summary, in 2015 EPA did not require CCS for as a part of the New Unit EGU NSPS for NGCC units because the agency found that CCS was not a technically feasible control technology in that rulemaking. While technological developments have advanced for capture systems on some high purity CO_2 streams, there is no full-scale capture system on any natural gas-fired turbines presently operating. ***The CCS control technology has not been installed and operated successfully on the type of source under review and has only been implemented on a pilot-scale basis, such that it is not demonstrated technology. Thus, CP Express concludes that the CCS control technology is not feasible for the ASCCTs***.

The second element of a CCS system, compression and CO_2 transport via a pipeline is technically feasible based on physical, chemical, and engineering principles.

The third element of a CCS system involves permanent storage of CO_2 either through injection into oilfields for EOR or underground injection for sequestration in deep geological formations. There are currently no commercially available underground injection wells for CCS available to the Project. For EOR, availability is dependent on the market in areas with a need by oilfield operators in close enough proximity. EOR has been used in some areas of Texas and Mississippi and is believed to be technically feasible, but, as discussed below, is not economically feasible. Sequestration via a Class VI Underground Injection Well has not been demonstrated in Louisiana. One company, Gulf Coast Sequestration (GCS) has publicly announced the development of an injection well system to sequester CO_2 in a 10,000-foot deep strata located onshore between the Sabine River and Lake Charles. It has reportedly filed an application for a federal Safe Drinking Water Act (SDWA) Underground Injection Control (UIC) Class VI permit with EPA and the Louisiana Department of Natural Resources, but has not yet received a permit.

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[35] PSD and Title V Permitting Guidance for Greenhouse Gases, March 2011, USEPA. Available at: https://www.epa.gov/sites/default/files/2015-07/documents/ghgguid.pdf. Accessed July 2022.

GCS has not provided any public information concerning its schedule for construction and commencement of operation. Thus, the GCS facility cannot be considered to be commercially available.

As there are no available permitted UIC sequestration sites reasonably near the Moss Lake Compressor Station, Venture Global would be required to develop its own injection system. Because there are no known wells actually employed in carbon sequestration systems in the area, the technology, while promising cannot be considered to be technically "available" in the area. Further, as discussed below, a full-scale CCS system for the emissions from the turbines is not economically feasible.

Economic Impact Analysis:

Even though CCS technology is deemed to be technically infeasible for the natural gas-fired turbines, CP Express considered the economic impacts from the implementation of CCS technology for the natural gas-fired turbines as conservative approach for two of the potentially cost-effective storage alternatives: transportation for use in an existing EOR operation or storage in an underground geological formation.

Industrial Uses of CO_2 such as Enhanced Oil Recovery (EOR) Fields

The "Regional Carbon Capture Deployment Initiative" evaluated carbon capture deployment across numerous industrial and power facilities and the associated impact on jobs and the economy of Louisiana. One of the conclusions from the study was the need for CO_2 transport infrastructure requiring an estimated $1.3 billion in private investment.[36] The privately owned and operated Denbury Resources (Denbury) pipeline system is currently the only CO_2 pipeline system in south Louisiana. This pipeline runs from Jackson Dome in Mississippi through southeastern Louisiana to Hastings in southeastern Texas.[37] Due to a lack of other readily available transportation options, this technology could not be considered as widely available for commercial use.

CP Express considered an alternative including capture, compression, and construction of approximately 20 miles of pipeline to connect to the Denbury pipeline system for transportation to an EOR site. However, a primary concern with utilization of the Denbury pipeline system is that it is operated by an independent, unregulated energy company. Further, Denbury filed for Chapter 11 bankruptcy reorganization relief which ended in September 2020 with the restructuring of over $2.1 million in debt.[38] While the company successfully reorganized, the amount of debt and the necessity of bankruptcy proceedings illustrate the risks associated with dealing with an unregulated entity in this field.

Further, due to Denbury being the only available CO_2 pipeline for transport to EOR facilities, CP Express would be reliant on a single, independent operator (i.e., Denbury) for maintaining compliance with its CCS requirements. Additionally, this alternative would place CP Express at an extreme economic disadvantage because Denbury would not be regulated by the Louisiana Public Service Commission and, therefore, would have complete control over how much to charge CP Express for transportation. Finally, it is unclear that Denbury would have sufficient pipeline capacity for the transportation of CP Express's

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[36] Great Plains Institute, Regional Carbon Capture Deployment Initiative – Jobs and Economic Impcat of Carbon Capture Deployment Louisiana. Available at: https://carboncaptureready.betterenergy.org/wp-content/uploads/2020/10/LA_Jobs.pdf. Accessed July 2022.

[37] Denbury, Gulf Coast CO_2 Pipelines. Available at: https://www.denbury.com/operations/operations-overview/gulf-coast-region/Pipelines/default.aspx. Accessed July 2022.

[38] See *docket In Re: Denbury Reesources Inc.*, Case No HO20-33801 (DRJ), U.S. Bankruptcy Court for the Southern District of Texas, Houston Division. See also https://www.reuters.com/article/bankruptcy-denbury/in-brief-denbury-resources-bankruptcy-judge-oks-2-1-billion-debt-for-equity-swap-plan-idUSL1N2FZ2HG. Accessed July 2022.

CO_2. For these reasons, CP Express did not conduct a detailed cost estimate analysis of the Denbury Pipeline alternative.

Underground Geological Storage of CO_2

CO2 can be stored in a deep saline aquifer for long-term geologic storage.[39] While sequestration of CO_2 in a saline aquifer has not been demonstrated in Southwest Louisiana, CP Express believes that such injection and sequestration is possible, at least for some volume of CO_2, depending upon detailed geological investigation prior to any such project. Therefore, CP Express has conservatively conducted a cost estimate analysis for CO_2 storage via a local Class VI Underground Injection Well connected to the CP Express by a pipeline.

Table 3-13 provides the summary of the estimated costs required to capture, compress, transport, and store CO_2 emissions from the ASCCTs (with the caveat that capture and sequestration are unproven technologies for the specific source and at the scale involved). The detailed cost-estimate for CCS control technology for ASCCTs is provided in Table E-1 of Appendix E.

Table 3-11. Cost Estimate for Capture, Compression, Transport, and Storage of CO_2 from the Turbines[1]

Activity	Annualized Cost Estimate, $	$/ton of CO_2 Reduction
Cost to Capture and Compress CO_2	$95,700,968	$135.6
Cost to Transport CO_2	$3,153,148	$4.5
Cost to Store CO_2	$28,855,558	$40.9
Total	**$127,709,674**	**$181.0**

[1] The annualized cost estimate is based on all turbines (5 ASCCTs).

Based on the information provided above, ***CCS technology is also eliminated as a technology that is cost prohibitive.***

GHG BACT Evaluation Summary for the ASCCTs

As discussed in Table 3-10, the following control technologies are proposed as BACT for GHG emissions (CO_2e) from the ASCCTs:

- Exclusively Combust Low Carbon Gaseous Fuel;
- Good Combustion Practices;
- Proper O&M Practices; and
- Insulation Properly Implemented for Surfaces Above 120 °F.

Table 3-12 provides the proposed GHG BACT emission limitations for each ASCCT.

[39] U.S. Department of Energy Office of Fossil Energy, NETL Carbon Storage Atlas, Fifth Edition, 2015, p. 28. Available at: https://www.netl.doe.gov/sites/default/files/2018-10/ATLAS-V-2015.pdf. Accessed July 2022.

Table 3-12 Proposed GHG BACT Emission Limits for Aeroderivative Simple Cycle Combustion Turbines

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Aeroderivative Simple Cycle Combustion Turbines (ASCCT1 through ASCCT5)	Exclusively Combust Low Carbon Gaseous Fuel, Good Combustion Practices, Proper O&M Practices, and Insulation Properly Implemented for Surfaces Above 120 °F.	123.53 lb CO_2e/MMBtu	Annual Average	Mass Balance and 40 C.F.R. Part 98 Subparts A and C	Normal

3.5 EMERGENCY GENERATORS

The Moss Lake Compressor Station proposes for five emergency generators (1,000 kW each). The emergency generators will combust clean, low sulfur diesel fuel. Each emergency generator and fire water pump will be used for a maximum of 100 operating hours per year for maintenance and testing and also during emergency situations; thus, emissions will only be generated during emergency situations such as an interruption in the facility's electric power supply and during maintenance and testing.

Emissions of PM, PM_{10}, $PM_{2.5}$, NO_X, CO, VOC, and GHGs are generated from the combustion of the diesel used to operate the emergency generators. The control technology analysis for each of these pollutants emitted from the emergency generators are discussed in the sections below. The data obtained from the RBLC database for the last 10 years (refer to Appendix D) has been reviewed for emergency generators.

As new affected sources, the emergency generators and fire water pumps will be subject to 40 CFR Part 63, Subpart ZZZZ for each of the pollutants evaluated. However, per 40 C.F.R § 63.6590(c)(1) for the emergency generators, there are no applicable emission standards for any of the pollutants evaluated because compliance with 40 C.F.R. Part 63 Subpart ZZZZ is achieved via compliance with 40 C.F.R. Part 60 Subpart IIII. Thus, for the subsequent sections evaluating the emergency generators, there are no additional references to 40 C.F.R Part 63 Subpart ZZZZ. However, where applicable, 40 C.F.R Part 60 Subpart IIII is included in the analysis.

3.5.1 NO_X BACT Analysis for the Emergency Generators

NO_X is formed in diesel engines by the oxidation of atmospheric nitrogen found in the combustion air (thermal NO_X) and the conversion of nitrogen chemically bound in the fuel (fuel NO_X). Thermal NO_X is the dominant NO_X formation mechanism in diesel engines because fuel nitrogen levels are typically low. Formation of thermal NO_X is highly dependent on the combustion temperature, with the majority of the thermal NO_X formed in the high-temperature region of the flame.[40]

[40] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, October 1996.

In accordance with 40 C.F.R Part 60 Subpart IIII, the five 1,000 kW emergency generators are subject to the NMHC + NO_X emission limit of 6.4 g/kW-hr. There are no applicable state requirements that establish NO_X emission standards.

The following technologies were identified in the RBLC search results and available literature (see Appendix D) potentially applicable for controlling NO_X emissions from the emergency generators:

- Selective Non-Catalytic Reduction (SNCR);
- Non-Selective Catalytic Reduction (NSCR);
- Selective Catalytic Reduction (SCR);
- EMx™ (formerly referred to as SCONOx™);
- Proper Engine Design and Good Combustion Practices;
- Ignition Timing Retard;
- Use of Clean, Low Sulfur Diesel Fuel; and
- Limit Hours of Operation.

The top-down BACT analysis for NO_X emissions from the emergency generators are presented in Table 3-13 below.

Table 3-13. Emergency Generators - Top-Down BACT Analysis for NO_X

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Emergency Generators (Diesel) (EGEN1 through EGEN5)	NO_X	Selective Non-Catalytic Reduction (SNCR)	Selective Non-Catalytic Reduction achieves NO_X emissions reductions via the injection of ammonia or urea into specific temperature zones in the exhaust gas. SNCR requires a higher operating temperature than SCR, sufficient residence time in the exhaust gas within a specific temperature range and does not use a catalyst. The operating temperature range required for effective operation is 1,600°F to 2,100°F.[1]	**Infeasible.** The exhaust temperature of the proposed emergency generators is below the required temperature for this technology.	N/A	N/A	N/A
		Non-Selective Catalytic Reduction (NSCR)	In non-selective catalytic reduction (NSCR) systems (also referred to as three-way catalysts), a catalyst is used to control NO_X and CO emissions under fuel-rich (less than 3-percent oxygen) conditions. It is effective only to rich burn engines that are capable of a simultaneous reduction of NO_X, CO, and unburned hydrocarbons in a single catalyst due to the stoichiometric nature of the combustion process.[2]	**Infeasible.** NSCR is effective only in a stoichiometric or fuel-rich environment where the combustion gas is nearly depleted of oxygen. This does not occur in emergency diesel engines, which operate in a lean-burn environment.	N/A	N/A	N/A
		Selective Catalytic Reduction (SCR)	SCR reduces NO_X emissions by injecting ammonia into the exhaust gas stream upstream of a catalyst. NO_X, ammonia, and oxygen react on the surface of the catalyst to form nitrogen and water. [3]	**Feasible.**	1 [5]	**Economically Infeasible**[6]	N/A
		EMx™	EMx™ (formerly referred to as SCONOx™) is a post-combustion technology that utilizes a proprietary oxidation catalyst and absorption technology using a single catalyst (potassium carbonate) for removal of NO_X, CO, and VOCs without the use of ammonia. While EMx™ achieves permitted NO_X emission levels, it is a challenge to operate due to high operating expenses and maintenance issues.	**Infeasible**. According to the US EPA, EMx™ systems operate at temperatures ranging from 300°F to 700°F.[4] The exhaust temperature of the emergency generators exceeds the maximum design range for EMx™; therefore, this technology is eliminated.	N/A	N/A	N/A
		Proper Engine Design and Good Combustion Practices	Good combustion practices including, but is not limited to, maintaining the proper air to fuel mixing ratio, assuring high temperatures and low oxygen levels in the primary combustion zone, maximizing thermal efficiency, and designing appropriate residence time needed to allow for complete combustion.[3]	**Feasible.**	3 [5]	N/A	**Selected as BACT**
		Ignition Timing Retard	The use of an ignition timing retard allows the combustion process to near the end of the compression stroke when the piston is in downward motion and the combustion chamber volume is increasing. As a result of the increased combustion chamber volume, the combustion temperature and pressure is lowered to reduce NO_X formation.[3]	**Feasible.**	2 [5]	N/A	**Selected as BACT**
		Use of Clean, Low Sulfur Diesel Fuel	Use of clean, low-sulfur diesel fuel improves the combustion efficiency; thus, reducing the NO_X emissions.	**Feasible**	3 [5]	N/A	**Selected as BACT**
		Limit Hours of Operations	Limiting the hours of operation for each emergency generator can lower NO_X emissions.	**Feasible**.	4 [5]	N/A	**Selected as BACT**

[1] U.S. EPA, *Air Pollution Control Technology Fact Sheet*, EPA-452/F-03-031. Available at: https://www3.epa.gov/ttncatc1/dir1/fsncr.pdf. Accessed July 2022.

[2] Sasadeusz, L. and Arney, G. "Operating Catalytic Emission Reduction Systems." Presentation for Gas/Electric Partnership 2008 Workshop, Houston, TX, Jan. 30-31, 2008 (hereinafter "Gas/Electric Partnership 2008 Workshop").

[3] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, Oct. 1996.

[4] U.S. EPA, Combined Heat and Power Partnership, Catalog of CHP Technologies, Section 3. Technology Characterization – Combustion Turbines. Available at: https://www.epa.gov/sites/production/files/2015-07/documents/catalog_of_chp_technologies_section_3._technology_characterization_-_combustion_turbines.pdf. Accessed July 2022.

[5] Rankings based on emission factor limits obtained from the RBLC database search results provided in Appendix D.

[6] The emergency generators will operate in non-emergency situations for a maximum of 100 hrs/yr. Thus, emissions are inherently low and the addition of SCR technology will provide minimal emissions benefit at a high cost. Based on the SCR cost analysis provided in Appendix E Table E-2 for the ASCCTs, this control technology is economically infeasible.

NO_X BACT Evaluation Summary for Emergency Generators

Consistent with the analysis in Table 3-13, for the emergency generators, NO_X BACT is proposed as follows:

- Proper Engine Design and Good Combustion Practices;
- Installation of Ignition Timing Retard;
- Combust Only Clean, Low Sulfur Diesel Fuel;
- Limit Hours of Normal Operation for Each Emergency Generator to 100 hrs/yr (these hours are exclusive of emergency operations); and
- Compliance with of 40 C.F.R. Part 60 Subpart IIII.

NO_X BACT emission limits for the emergency generators are shown in Table 3-14.

Table 3-14. Proposed NO_X BACT Emission Limits for Emergency Generators

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Emergency Generators (Diesel) (EGEN1 through EGEN5)	Proper Engine Design and Good Combustion Practices; Installation of Ignition Timing Retard; Combust Only Clean, Low Sulfur Diesel Fuel; Limit Hours of Normal Operation for Each Emergency Generator to 100 hrs/yr; and Compliance with 40 C.F.R Part 60 Subpart IIII.	6.4 g/kW-hr	Avg Hourly[1]	40 C.F.R. Part 60 Subpart IIII	Maintenance/Readiness Testing and Operation

[1]Average of three 1-hour stack test runs in accordance with 40 C.F.R. Part 60 Subpart IIII.

3.5.2 CO BACT Analysis for the Emergency Generators

CO is formed by incomplete combustion of the diesel fuel in the combustion chamber and depends in varying degrees on the extent of fuel mixing, resulting air-to-fuel ratios, combustion temperature, and residence time. Emissions of CO are an intermediate product produced by the incomplete combustion of hydrocarbons. The emissions are formed in hot, oxygen-depleted regions of the combustion chamber and at the edges of the lean flame zone where the temperature is lower. Short residence times also contribute to CO formation.[41]

Per the requirements of 40 C.F.R Part 60 Subpart IIII, the emergency generators are subject to the CO emission limitation of 3.5 g/kW-hr. The emergency generators are not subject to any state requirements that establish CO emission standards.

[41] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, October 1996.

The following technologies were identified in the RBLC search results and available literature (see Appendix D) as potentially applicable for controlling CO emissions from the emergency generators:

- Oxidation Catalyst;
- EMx™ (formerly referred to as SCONOx™);
- Proper Engine Design and Good Combustion Practices;
- Use of Clean, Low Sulfur Diesel Fuel; and
- Limit Hours of Operation.

Table 3-15 provides the top-down BACT analysis for CO emissions from the emergency generators.

Table 3-15. Emergency Generators - Top-Down BACT Analysis for CO

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Emergency Generators (Diesel) (EGEN1 through EGEN5)	CO	Oxidation Catalyst	Oxidation Catalyst control technology utilizes a catalyst to oxidize CO at lower temperatures. The addition of a catalyst to the basic thermal oxidation process accelerates the rate of oxidation by adsorbing oxygen from the air stream and CO in the waste stream onto the catalyst surface to react to form CO_2 and H_2O.	**Infeasible**. Due to the intermittent use of the emergency generators, the Oxidation Catalyst does not have sufficient time to warm up to the effective operating temperature. Additionally, Oxidation Catalyst systems are typically used on equipment with exhaust gas temperatures ranging from approximately 600°F to 800°F. [1] Thus, the effective temperature range for oxidation catalyst is outside of the operating parameters for the exhaust from the emergency generators.	N/A	N/A	N/A
		EMx™	EMx™ (formerly referred to as SCONOx™) is a post-combustion technology that utilizes a proprietary oxidation catalyst and absorption technology using a single catalyst (potassium carbonate) for removal of NO_x, CO, and VOCs without the use of ammonia. While EMx™ achieves permitted NOx emission levels, it is a challenge to operate due to high operating expenses and maintenance issues.	**Infeasible**. According to the US EPA, EMx™ systems operate at temperatures ranging from 300 °F to 700 °F.[2] The exhaust temperature of the emergency generators exceeds the maximum design range for EMx™; therefore, this technology is eliminated.	N/A	N/A	N/A
		Proper Engine Design and Good Combustion Practices	Good combustion practices including, but not limited to, maintaining the proper air to fuel mixing ratio, assuring high temperatures and low oxygen levels in the primary combustion zone, maximizing thermal efficiency, and designing appropriate residence time needed to allow for complete combustion.[3]	**Feasible.**	N/A	N/A	**Selected as BACT**
		Use of Clean, Low Sulfur Diesel Fuel	Use of clean, low-sulfur diesel fuel improves the combustion efficiency; thus, reducing the CO emissions.	**Feasible**	N/A	N/A	**Selected as BACT**
		Limit Hours of Operations	Limiting the hours of operation for each emergency generator can lower annual CO emissions.	**Feasible**.	N/A	N/A	**Selected as BACT**

[1] U.S. EPA, *Air Pollution Control Technology Fact Sheet*, EPA-452/F-03-018. Available at: https://www3.epa.gov/ttnchie1/mkb/documents/fcataly.pdf. Accessed July 2022.
[2] U.S. EPA, Combined Heat and Power Partnership, Catalog of CHP Technologies, Section 3. Technology Characterization – Combustion Turbines. Available at: https://www.epa.gov/sites/production/files/2015-07/documents/catalog_of_chp_technologies_section_3._technology_characterization_-_combustion_turbines.pdf. Accessed July 2022.
[3] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, October 1996.

CO BACT Evaluation Summary for the Emergency Generators

For the emergency generators, BACT for CO is proposed as follows:

- Proper Engine Design and Good Combustion Practices;
- Combust Only Clean, Low Sulfur Diesel Fuel;
- Limit Hours of Normal Operation for Each Emergency Generator to 100 hrs/yr (these hours are exclusive of emergency operations); and
- Compliance with of 40 C.F.R. Part 60 Subpart IIII.

Table 3-16 provides the CO BACT emission limits for the emergency generators.

Table 3-16. Proposed CO BACT Emission Limits Emergency Generators

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Emergency Generators (Diesel) (EGEN1 through EGEN5)	Proper Engine Design and Good Combustion Practices; Combust Only Clean, Low Sulfur Diesel Fuel; Limit Hours of Normal Operation for Each Emergency Generator to 100 hrs/yr; and Compliance with 40 C.F.R Part 60 Subpart IIII.	3.5 g/kW-hr	Avg Hourly[1]	40 C.F.R. Part 60 Subpart IIII	Maintenance /Readiness Testing and Operation

[1]Average of three 1-hour stack test runs in accordance with 40 C.F.R. Part 60 Subpart IIII.

3.5.3 $PM/PM_{10}/PM_{2.5}$ BACT Analysis for the Emergency Generators

Internal combustion engines may emit white, blue, and/or black smoke. White smoke in the exhaust typically represents liquid particulates in the exhaust and often occurs during an engine cold start, idling, or low load operation. Blue smoke typically is generated when lubricating oil leaks into the combustion chamber and is partially combusted. Soot is the primary constituent of black smoke. For these various smoke types, proper maintenance is the most effective prevention method.[42]

In accordance with 40 C.F.R. Part 60 Subpart IIII, the emergency generators will be subject to the PM emission limit of 0.20 g/kW-hr. Regarding state requirements, the emergency generators are subject to the opacity regulations of LAC 33:III.Chapters 11 and 13 as well as the particulate emission standard of 0.6 lb/MMBtu per LAC 33:III.1313.C.

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[42] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, Oct. 1996.

The following technologies were identified in the RBLC search results and available literature (see Appendix D) as potentially applicable for controlling PM/PM_{10}/$PM_{2.5}$ emissions from the emergency generators:

- Proper Engine Design and Good Combustion Practices;
- Use of Clean, Low Sulfur Diesel Fuel;
- Limit Hours of Operation; and
- Post-Combustion PM Control such as Diesel Particulate Filter.

The top-down BACT analysis for PM/PM_{10}/$PM_{2.5}$ from the emergency generators are presented in Table 3-17 below.

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Table 3-17. Emergency Generators - Top-Down BACT Analysis for PM/PM_{10}/$PM_{2.5}$

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Emergency Generators (Diesel) (EGEN1 through EGEN5)	PM/PM_{10}/$PM_{2.5}$	Proper Engine Design and Good Combustion Practices	Good combustion practices including, but not limited to, maintaining the proper air to fuel mixing ratio, assuring high temperatures and low oxygen levels in the primary combustion zone, maximizing thermal efficiency, and designing appropriate residence time needed to allow for complete combustion.[1]	**Feasible.**	2 [3]	N/A	**Selected as BACT**
		Use of Clean, Low Sulfur Diesel Fuel	Use of clean, low-sulfur diesel fuel improves the combustion efficiency; thus, reducing the PM/PM_{10}/$PM_{2.5}$ emissions	**Feasible.**	1 [3]	N/A	**Selected as BACT**
		Limit Hours of Operations	Limiting the hours of operation for each emergency generator can lower PM/PM_{10}/$PM_{2.5}$ emissions.	**Feasible**.	3 [3]	N/A	**Selected as BACT**
		Post-Combustion PM Control such as Diesel Particulate Filter	PM removal from diesel exhaust via a diesel particulate filter (DPF) is by physical filtration. A typical design utilizes a ceramic honeycomb-shaped channel through which exhaust gases flow. PM is deposited on both sides of the channel walls. [2]	**Feasible**. Although feasible, the emergency generators operate intermittently with minimal emissions.	2 [3]	Higher ranked control technology selected as BACT. No further analysis is required.	N/A

[1] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, October 1996.

[2] Description of diesel particulate filter obtained from Johnson Matthey Technologies. Available at: https://matthey.com/en/products-and-services/mobile-emissions-control/diesel-applications/diesel-particulate-filter. Accessed July 2022.

[3] Rankings based on qualitative analysis of RBLC database search (refer to Appendix D) and available literature.

$PM/PM_{10}/PM_{2.5}$ BACT Evaluation Summary for the Emergency Generators

BACT for $PM/PM_{10}/PM_{2.5}$ for the emergency generators is proposed as follows:

- Proper Engine Design and Good Combustion Practices;
- Combust Only Clean, Low Sulfur Diesel Fuel;
- Limit Hours of Normal Operation for Each Emergency Generator to 100 hrs/yr (these hours are exclusive of emergency operations); and
- Compliance with of 40 C.F.R. Part 60 Subpart IIII.

$PM/PM_{10}/PM_{2.5}$ emission limits for emergency generators are shown in Table 3-18.

Table 3-18. Proposed $PM/PM_{10}/PM_{2.5}$ BACT Emission Limits for Emergency Generators

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Emergency Generators (Diesel) (EGEN1 through EGEN5)	Proper Engine Design and Good Combustion Practices; Combust Only Clean, Low Sulfur Diesel Fuel; Limit Hours of Normal Operation for Each Emergency Generator to 100 hrs/yr; and Compliance with 40 C.F.R. Part 60 Subpart IIII.	0.20 g/kW-hr	Avg Hourly[1]	40 C.F.R. Part 60 Subpart IIII	Maintenance/ Readiness Testing and Operation

[1]Average of three 1-hour stack test runs in accordance with 40 C.F.R. Part 60 Subpart IIII.

3.5.4 VOC BACT Analysis for the Emergency Generators

VOCs formation is caused by incomplete combustion of the diesel fuel in the combustion chamber, and depends, to varying degrees, on the extent of fuel mixing, resulting air-to-fuel ratios, combustion temperature, and residence time.[43]

In accordance with 40 C.F.R Part 60 Subpart IIII, the five 1,000 kW emergency generators are subject to the NMHC + NO_X emission limit of 6.4 g/kW-hr. There are no applicable state requirements that establish VOC emission standards.

The following technologies were identified in the RBLC search results and available literature (see Appendix D) as potentially applicable for controlling VOC emissions from the emergency generators:

- Oxidation Catalyst;
- EMx™ (formerly referred to as SCONOx™);
- Proper Engine Design and Good Combustion Practices;
- Use of Clean, Low Sulfur Diesel Fuel; and
- Limit Hours of Operation.

The top-down BACT analysis for VOC emissions from the emergency generators is presented in Table 3-19 below.

[43] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, October 1996.

Table 3-19. Emergency Generators - Top-Down BACT Analysis for VOC

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Emergency Generators (Diesel) (EGEN1 through EGEN5)	VOC	Oxidation Catalyst	The use of an Oxidation Catalyst is a post-combustion technology wherein the products of combustion are introduced to a catalytic bed at the appropriate temperature point. The catalyst promotes the oxidation of VOC as well as CO, reducing emissions of both. Such systems typically achieve a maximum VOC removal efficiency in the range of 20 to 50 percent.	**Infeasible**. Due to the intermittent use of the emergency generators, the Oxidation Catalyst does not have sufficient time to warm up to the effective operating temperature. Additionally, Oxidation Catalyst systems are typically used on equipment with exhaust gas temperatures ranging from approximately 600°F to 800°F. [1] Thus, the effective temperature range for Oxidation Catalyst is outside of the operating parameters for the exhaust from the emergency generators.	N/A	N/A	N/A
		EMx™	EMx™ (formerly referred to as SCONOx™) is a post-combustion technology that utilizes a proprietary oxidation catalyst and absorption technology using a single catalyst (potassium carbonate) for removal of NO_X, CO, and VOCs without the use of ammonia. While EMx™ achieves permitted NO_X emission levels, it is a challenge to operate due to high operating expenses and maintenance issues.	**Infeasible**. According to the US EPA, EMx™ systems operate at temperatures ranging from 300°F to 700°F.[2] The exhaust temperature of the emergency generators exceeds the maximum design range for EMx™; therefore, this technology is eliminated.	N/A	N/A	N/A
		Proper Engine Design and Good Combustion Practices	Good combustion practices including, but not limited to, maintaining the proper air to fuel mixing ratio, assuring high temperatures and low oxygen levels in the primary combustion zone, maximizing thermal efficiency, and designing appropriate residence time needed to allow for complete combustion.[3]	**Feasible.**	N/A	N/A	**Selected as BACT**
		Use of Clean, Low Sulfur Diesel Fuel	Use of clean, low-sulfur diesel fuel improves the combustion efficiency; thus, reducing the VOC emissions.	**Feasible**	N/A	N/A	**Selected as BACT**
		Limit Hours of Operations	Limiting the hours of operation for each emergency generator can lower annual VOC emissions.	**Feasible**.	N/A	N/A	**Selected as BACT**

[1] U.S. EPA, *Air Pollution Control Technology Fact Sheet*, EPA-452/F-03-018. Available at: https://www3.epa.gov/ttnchie1/mkb/documents/fcataly.pdf. Accessed July 2022.
[2] U.S. EPA, Combined Heat and Power Partnership, Catalog of CHP Technologies, Section 3. Technology Characterization – Combustion Turbines. Available at: https://www.epa.gov/sites/production/files/2015-07/documents/catalog_of_chp_technologies_section_3._technology_characterization_-_combustion_turbines.pdf. Accessed July 2022.
[3] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 3.4, Large Stationary Diesel and All Stationary Dual-fuel Engines, Oct. 1996.

VOC BACT Evaluation Summary for the Emergency Generators

Consistent with the analysis in Table 3-19, for the emergency generators, VOC BACT is proposed as follows:

- Proper Engine Design and Good Combustion Practices;
- Combust Only Clean, Low Sulfur Diesel Fuel;
- Limit Hours of Normal Operation for Each Emergency Generator to 100 hrs/yr (these hours are exclusive of emergency operations); and
- Compliance with 40 C.F.R. Part 60 Subpart IIII.

VOC emission limits for emergency generators are shown in Table 3-20.

Table 3-20. Proposed VOC BACT Emission Limits for Emergency Generators

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Emergency Generators (Diesel) (EGEN1 through EGEN5)	Proper Engine Design and Good Combustion Practices; Combust Only Clean, Low Sulfur Diesel Fuel; Limit Hours of Normal Operation for Each Emergency Generator to 100 hrs/yr; and Compliance with 40 C.F.R. Part 60 Subpart IIII.	6.4 g/kW-hr	Avg Hourly[1]	40 C.F.R. Part 60 Subpart IIII	Maintenance/ Readiness Testing and Operation

[1] Average of three 1-hour stack test runs in accordance with 40 C.F.R. Part 60 Subpart IIII.

3.5.5 GHG BACT Analysis for the Emergency Generators

GHG emissions from the emergency generators result from the combustion of fuel and are directly correlated with the amount of fuel burned. Therefore, the less fuel burned per unit of energy produced or greater energy efficiency established, the less GHG emissions generated.

The emergency generators are not subject to any federal or state requirements that establish GHG emission standards. Thus, the uncontrolled emissions from the emergency generators are the baseline GHG emissions (CO_2e).

The following technologies were identified in the RBLC search results and available literature (see Appendix D) as potentially applicable for controlling GHG emissions from the emergency generators:

- Exclusively Combust Low Carbon Gaseous Fuel;
- Good Combustion Practices;
- Proper O&M Practices;

- Insulation Properly Implemented for Surface Above 120°F; and
- Carbon Capture and Sequestration/Storage.

The top-down BACT analysis for GHG is presented in Table 3-21 below.

Table 3-21. Emergency Generators - Top-Down BACT Analysis for CO_2e

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Emergency Generators (Diesel) (EGEN1 through EGEN5)	GHG (CO_2e)	Exclusively Combust Low Carbon Gaseous Fuel	Use of gaseous fuels, in preference over other fossil fuels such as fuel oil or coal, results in lower GHG emissions per unit of energy output. 40 CFR Part 98, Table C-1 (U.S. EPA's Mandatory GHG Reporting Rule) lists gaseous fuel (e.g., natural gas or fuel gas) as having one of the lowest CO_2 generation rates of any of the fuels listed.	**Infeasible**. Natural gas-fired engines may provide lower GHG emissions compared to diesel-fired engines. However, natural gas is not technically feasible for the emergency generators at the facility as they would be utilized in the event of facility-wide power outage.	N/A	N/A	N/A
		Good Combustion Practices	Good combustion practices include ensuring good equipment design, use of gaseous fuels for good mixing, and proper combustion techniques such as optimizing the air to fuel ratio. This also includes maintaining the proper level of oxygen in the exhaust such that combustion efficiency is maximized, resulting in reduced fuel consumption and lower GHG emissions.	**Feasible**.	N/A	N/A	**Selected as BACT**
		Proper O&M Practices	Implementing good O&M practices to improve the combustion efficiency of the unit. Increasing combustion efficiency reduces fuel consumption, which results in lower GHG emissions.	**Feasible.**	N/A	N/A	**Selected as BACT**
		Insulation Properly Implemented for Surfaces Above 120°F	Insulation will be properly implemented for surfaces above 120°F to prevent heat loss and improve combustion efficiency.	**Feasible**	N/A	N/A	**Selected as BACT**
		Carbon Capture and Sequestration/Storage (CCS)	CCS is a set of technologies that can greatly reduce CO_2 emissions from fossil-fuel-fired power plants and large industrial sources. CCS is a three-step process that includes capturing CO_2, transporting the captured and compressed CO_2, and underground injection and geologic sequestration of the CO_2 into deep underground rock formations. These formations consist of porous rock that holds the CO_2 and are often a mile or more beneath the surface. Overlying these formations are impermeable, non-porous layers of rock that trap the CO_2 and prevent it from migrating upward.	**Infeasible.** CCS is not considered an available control option for emergency equipment that operates on an intermittent basis. Such equipment must be immediately available during plant emergencies without the constraint of waiting to start up the CCS process.	N/A	N/A	N/A

GHG BACT Evaluation Summary for the Emergency Generators

Based on Table 3-21, BACT for CO_2e emissions from the emergency generators is proposed as follows:

- Good Combustion Practices;
- Proper O&M Practices; and
- Insulation Properly Implemented for Surfaces Above 120°F.

GHG BACT emission limits for the emergency generators are shown in Table 3-22.

Table 3-22. Proposed GHG BACT Emission Limits for Emergency Generators

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Emergency Generators (Diesel) (EGEN1 through EGEN5)	Good Combustion Practices, Proper O&M Practices, and Insulation Properly Implemented for Surfaces Above 120°F.	23 lb CO_2e/gal diesel	Annual Average	40 C.F.R. Part 98 Subparts A and C	Maintenance/ Readiness Testing and Operation

3.6 CONDENSATE STORAGE TANK

Table 3-23 provides the condensate storage tank proposed to be constructed and operated at the Moss Lake Compressor Station. The storage tank has the potential to emit VOCs.

Table 3-23. Proposed Storage Tank – Moss Lake Compressor Station

Emission Unit	Emission Unit Description	Tank Volume (gals)	Vapor Pressure (psia)
TK01	Condensate Storage Tank	4,512.13	<=3.64 psia

The condensate storage tank will emit VOCs through the tank pressure relief vent(s), which allow air to enter/exit the tank in order to avoid tank failure. Breathing losses occur via natural variations in the temperature of the tank contents throughout the day, which are caused by radiant heat from the sun as well as atmospheric temperature changes. Working losses occur when the tank is filled, and the displaced air is vented.

The data obtained from the RBLC database for the last 10 years (refer to Appendix D) has been reviewed for the storage tank. The VOC control technology analysis for the storage tank is discussed in the sections below.

3.6.1 VOC BACT Analysis for the Storage Tank

A detailed analysis of the storage tank with respect to federal and state regulations is provided in Section 22 of the AAE. The storage tank is not subject to any federal or state regulations establishing standards for VOCs. However, as provided in Section 22 of the AAE, general operations at the Moss Lake Compressor Station will be subject to LAC 33:III.2113, which provides regulations outlining best practical housekeeping and maintenance practices to reduce VOC emissions. Because there are no specific regulatory requirements for VOC emissions from the tank, the uncontrolled VOC emissions from the tank are the baseline VOC emissions.

Based on the review of the RBLC data and available literature, the following technologies were identified as potentially applicable for controlling VOC emissions from the storage tank:

- Internal Floating Roof;
- External Floating Roof;
- Submerged Fill Pipe;
- White Paint;
- Vapor Combustion Control Device; and
- Carbon Adsorption System.

The top-down BACT analysis for VOC emissions from the storage tank is presented in Table 3-24.

Table 3-24. Condensate Storage Tank - Top-Down BACT Analysis for VOC

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Condensate Storage Tank (TK01)	VOC	Internal Floating Roof	An internal floating roof tank (IFRT) has both a permanent fixed roof and a floating roof inside. The two basic types of IFRTs are provided below: • IFRT in which the fixed roof is supported by vertical columns within the tank; and • IFRT with a self-supporting fixed roof and no internal support columns. IFRT decks rise/fall consistent with the liquid level in the tank and either float directly on the liquid surface (contact deck) or rest on pontoons above the liquid surface (noncontact deck). Evaporative losses from the tank are minimized with the installation of a floating roof; however, emissions can originate from deck fittings, non-welded seams, and the annular space between the deck and wall.[1]	**Feasible.** Tanks incorporating floating roof control technology are normally subject to NSPS and/or NESHAP requirements and have much higher throughputs of high vapor pressure commodities being stored.	1 [3]	**Economically Infeasible** [4]	N/A
		External Floating Roof	An external floating roof tank (EFRT) typically consists of an open-topped cylindrical steel shell equipped with a roof that floats on the stored liquid's surface. Thus, the roof rises/falls consistent with the liquid level in the tank. An EFRT consists of a deck, fittings, and rim seal system. Floating decks currently being utilized are constructed of welded steel plate and classified as either pontoon or double-deck. Evaporative losses from an EFRT are minimized via the floating roof and rim seal system. However, emissions can occur via the rim seal system, deck fitting, and exposed liquid on the tank walls.[1]		1 [3]	**Economically Infeasible** [4]	N/A
		Submerged Fill Pipe	During loading of a storage tank, a submerged fill pipe is utilized to prevent splashing of material loaded. Because the fill pipe opening is submerged below the tank's liquid surface level, liquid turbulence is mitigated during loading resulting in minimal emissions into the vapor space above the liquid surface. This technology applies to tanks without floating roofs as floating roof tanks are designed for loading below the liquid surface level.	**Feasible.**	2 [3]	N/A	**Selected as BACT**
		White Paint	Evaporation losses can be reduced due to the condition and color of the tank's shell and roof. The primary factor in evaporative losses is temperature; thus, reducing the temperature of the stored liquid can reduce evaporative losses. Solar radiation will increase the temperature of the liquid in a storage tank, but the extent of the temperature increase is determined by the color and condition of the paint on the tank walls and roof. Paints having a low solar absorptance (i.e., light colored tanks) will heat up less than paints with high solar absorptance (i.e., dark colored tanks). White paint is highly reflective and typically used to minimize the tank's ambient temperature, which, in turn, reduces standing losses.[2]	**Feasible.**	3 [3]	Higher ranked control technology selected as BACT. No further analysis is required.	N/A
		Vapor Combustion Control Device	During tank loading operations, the displaced vapors from the storage tank are directed to a vapor control device (e.g., flare or thermal oxidizer). For this technology, the stored liquid must have sufficient vapor pressure to force the emission stream through the vent header for subsequent control. Utilizing a vapor combustion device will result in additional criteria pollutants due to products of combustion. This technology can reduce inlet emissions of total VOC by at least 95 Percent.	**Feasible.**	1 [3]	**Economically Infeasible** [4]	N/A
		Carbon Adsorption System	This control technology reduces VOCs via connection of the fixed roof tank vent to a header, which is routed to the adsorption system. Carbon adsorption systems is typically made up of at least two carbon beds in series. Due to the vapor composition of the emission stream to be controlled, the effectiveness of the carbon adsorption system is chemical dependent and can vary. The control efficiency of the carbon bed decreases over time; therefore, once the carbon bed is "spent," the carbon beds must be switched. The spent carbon must be disposed of as waste or regenerated.	**Feasible.**	1 [3]	**Economically Infeasible** [4]	N/A

[1] U.S. EPA, AP-42, Fifth Edition, Volume 1, Section 7.1, Organic Liquid Storage Tanks, June 2020.

[2] Stricklin, E. "Evaporation Loss Measurement from Storage Tanks". Available at: https://www.technokontrol.com/pdf/evaporation/evaporation-loss-measurement.pdf. Accessed July 2022.

[3] Rankings based on qualitative analysis of RBLC database search results provided in Appendix D and TCEQ BACT guidance (Available at: https://www.tceq.texas.gov/permitting/air/nav/air_bact_chemsource.html. Accessed July 2022)

[4] Refer to Appendix E Table E-5 for detailed cost analysis. VOC emissions from this tank are 0.52 tpy. An economic analysis was performed to determine if additional controls are cost effective for fixed-roof tanks, which are exempt from NSPS and/or NESHAP control requirements (tanks subject to control under NSPS and/or NESHAP are typically equipped with floating roof technology). As a surrogate for determining add-on control technology, the condensate storage tank was evaluated utilizing a thermal oxidizer. Because this analysis resulted in an economic infeasibility determination on the order of multi-million dollars per ton, it is reasonable to conclude the same for floating roof control technology.

VOC BACT Evaluation Summary for the Condensate Storage Tank

Based on the analysis provided in Table 3-24, VOC BACT from the storage tank is proposed as follows:

- Condensate Storage Tank will be equipped with a fixed roof and comply with the best practical housekeeping and maintenance practices as specified in LAC 33:III.2113.

Table 3-25 provides the proposed VOC BACT emission limitations for the storage tank.

Table 3-25. Proposed VOC BACT Emission Limits for the Storage Tank

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Condensate Storage Tank (TK01)	Follow the best practical housekeeping and maintenance practices as specified in LAC 33:III.2113.	0.52 tpy	Annual Average	AP-42 Section 7.1 and Engineering Judgement	Normal

3.7 EQUIPMENT LEAKS

The Moss Lake Compressor Station will emit fugitive VOC and GHG emissions. These emissions will originate from fugitive components such as valves, pumps, compressors, seals, flanges, vents, open ends, and connectors. Accordingly, the data obtained from the RBLC database for the last 10 years (refer to Appendix D) has been reviewed for fugitives/equipment leaks. The control technology analysis for VOC and GHG emissions from equipment leaks are discussed in the sections below.

3.7.1 VOC BACT Analysis for Equipment Leaks

Fugitive components at the facility are subject to 40 C.F.R Part 60 Subpart OOOOa, which establishes emission standards and associated emissions monitoring, reporting, and recordkeeping for the control of VOC. The fugitive components are also subject to LAC 33:III.2111, which requires that all rotary pumps and compressors handling VOC with a true vapor pressure of 1.5 psia or greater at handling conditions be equipped with mechanical seals or other equivalent equipment.

The results of the RBLC database search as well as review of available literature have identified the following technologies as potentially applicable for controlling VOC emissions from fugitive components:

- Proper Piping Design and Installation;
- Leak Detection and Repair (LDAR) Program; and
- Good Work Practices.

Table 3-26 provides the top-down BACT analysis for VOC emissions due to equipment leaks.

Table 3-26. Equipment Leaks - Top-Down BACT Analysis for VOC

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Equipment Leaks (FUG01)	VOC	Proper Piping Design and Installation	This control technology assists with ensuring a leak-tight system and can include the following: • Ensure correct bracing; • Manual confirmation that all joints are tight; • Manual visual verification that all pipes are correctly assembled; • Ensure proper piping design for adequate/desired pressure; • Ensure correct seal design/selection; • Ensure correct valve packing or O rings installation; and • Manually inspect disk gaskets installation on pressure relief devices. [1]	**Feasible.**	2 [2]	N/A	**Selected as BACT**
		Leak Detection and Repair (LDAR) Program	A LDAR program's primary purpose is to identify unintentional equipment leaks and subsequent repair. Several types of LDAR Programs may be utilized to detect leaks to minimize emissions of VOCs and methane.	**Feasible.**	1 [2]	N/A	**Selected as BACT**
		Good Work Practices	Development and implementation of good work practices such as Auditory/Visual/Olfactory (AVO) inspection as discussed below can minimize leaks. **AVO** AVO is an LDAR monitoring method involving visual inspections and observations (e.g., fluids dripping, spraying, etc. from or around components), sound (e.g., hissing), and smell. If detected, such leaks require immediate repair. Unless mandated by state and/or federal regulations, AVO does not require specific monitoring frequencies.	**Feasible.**	3 [2]	N/A	**Selected as BACT**

[1] U.S. EPA, Office of Compliance, Leak Detection and Repair A Best Practices Guide. Available at: https://www.epa.gov/compliance/leak-detection-and-repair-best-practices-guide. Accessed July 2022.
[2] Rankings based on qualitative analysis of RBLC database search (refer to Appendix D) and available literature.

VOC BACT Evaluation Summary for Equipment Leaks

As detailed in Table 3-26, VOC BACT for the fugitive emissions from equipment leaks is proposed as follows:

- Proper Piping Design and Installation;
- LDAR Program;
- Good Work Practices; and
- Compliance with LAC 33:III.211 and 40 C.F.R. Part 60 Subpart OOOOa.

The proposed VOC BACT for fugitive emissions from equipment leaks is provided in Table 3-27.

Table 3-27. Proposed VOC BACT Emission Limits for Equipment Leaks

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Equipment Leaks (FUG01)	LDAR Program; Proper Piping Design and Installation; Good Work Practices; and Compliance with LAC 33:III.2111 and 40 C.F.R. Part 60 Subpart OOOOa.	24.69 tpy	Annual Average	Engineering Judgment, EPA's *Protocol for Equipment Leak Emission Estimates*, (Tables 2-1 and 2-4), 40 C.F.R. Part 60 Subpart OOOOa.	Normal

3.7.2 GHG BACT Analysis for Equipment Leaks

The Moss Lake Compressor Station will have the potential to emit GHG fugitive emissions from process equipment (e.g., piping components such as valves and flanges). The majority of the emissions will be methane.

Fugitive components at the facility are subject to 40 C.F.R. Part 60 Subpart OOOOa, which establishes emission standards and associated emissions monitoring, reporting, and recordkeeping for the control of GHGs. The GHG standard in 40 C.F.R. Part 60 Subpart OOOOa is in the form of a limitation on emissions of methane. Fugitive components at the facility are not subject to any state emission standards for GHGs.

Based on the review of the RBLC data and available literature, the following technologies were identified as potentially applicable for controlling GHG emissions from fugitive components:

- Proper Piping Design and Installation;
- LDAR Program; and
- Good Work Practices.

The top-down BACT analysis for GHG emissions from equipment leaks is presented in Table 3-28.

Table 3-28. Equipment Leaks - Top-Down BACT Analysis for CO_2e

Process		Step 1. Identify Air Pollution Control Technologies		Step 2. Eliminate Technically Infeasible Options	Step 3. Rank Remaining Control Technologies	Step 4. Evaluate and Document Most Cost-Effective Controls	Step 5. Select BACT
Equipment	**PSD Pollutant**	**Control Technology**	**Control Technology Description**	**Technical Feasibility**			
Equipment Leaks (FUG01)	GHG (CO_2e)	Proper Piping Design and Installation	As detailed in Section 3.7.1, this control technology assists with ensuring a leak-tight system to reduce GHG emissions due to leaks.[1]	**Feasible.**	2 [2]	N/A	**Selected as BACT**
		LDAR Program	A LDAR program's primary purpose is to identify unintentional equipment leaks and subsequent repair. Several types of LDAR Programs may be utilized to detect leaks to minimize emissions of VOCs and methane.	**Feasible.**	1 [2]		**Selected as BACT**
		Good Work Practices	Development and implementation of good work practices such as Auditory/Visual/Olfactory (AVO) inspection as discussed below can minimize leaks. **AVO** AVO is an LDAR monitoring method involving visual inspections and observations (e.g., fluids dripping, spraying, etc. from or around components), sound (e.g., hissing), and smell. If detected, such leaks require immediate repair. Unless mandated by state and/or federal regulations, AVO does not require specific monitoring frequencies.	**Feasible.**	3 [2]	N/A	**Selected as BACT**

[1] U.S. EPA, Office of Compliance, Leak Detection and Repair A Best Practices Guide. Available at: https://www.epa.gov/compliance/leak-detection-and-repair-best-practices-guide. Accessed July 2022.
[2] Rankings based on qualitative analysis of RBLC database search (refer to Appendix D) and available literature.

GHG BACT Evaluation Summary for Equipment Leaks

Based on the analysis provided in Table 3-28, GHG BACT for the fugitive emissions from equipment leaks is proposed as follows:

- Proper Piping Design and Installation;
- LDAR Program to monitor methane emissions;
- Good Work Practices; and
- Compliance with 40 C.F.R. Part 60 Subpart OOOOa.

Table 3-29 provides the proposed GHG BACT for fugitive emissions from equipment leaks.

Table 3-29. Proposed GHG BACT Emission Limits for Equipment Leaks

Emission Unit	Proposed BACT	Proposed BACT Emission Limit		Proposed BACT Basis	Operating Mode
Equipment Leaks (FUG01)	Proper Piping Design and Installation; LDAR Program to monitor methane emissions; Good Work Practices; and Compliance with 40 C.F.R. Part 60 Subpart OOOOa.	3,573 tpy CO_2e	Annual Average	Engineering Judgment, EPA's *Protocol for Equipment Leak Emission Estimates*, (Table 2-4), 40 C.F.R. Part 98 Subparts A, and 40 C.F.R. Part 60 Subpart OOOOa.	Normal

4. APPLICATION FOR APPROVAL OF EMISSIONS OF AIR POLLUTANTS

Department of Environmental Quality
Office of Environmental Services
Air Permits Division
P.O. Box 4313
Baton Rouge, LA 70821-4313
(225) 219-3417

LOUISIANA

Application for Approval of Emissions of Air Pollutants from Part 70 Sources

PLEASE TYPE OR PRINT

1. Facility Information [LAC 33:III.517.D.1]

Facility Name or Process Unit Name (if any) Moss Lake Compressor Station	☒ All Process Units ☐ Process Unit-specific Permit
Agency Interest Number (A.I. Number) 232173	**Currently Effective Permit Number(s)** N/A
Company - Name of Owner Venture Global CP Express, LLC	
Company - Name of Operator (if different from Owner)	
Parent Company (if Company – Name of Owner given above is a division)	
Federal Tax-ID	

☒ corporation, partnership, or sole proprietorship ☐ regulated utility ☐ municipal government

☐ state government ☐ federal government ☐ other, specify _____

2. Physical Location and Process Description [LAC 33:III.517.D.18, unless otherwise stated]

What does this facility produce? Add more rows as necessary.

The proposed Moss Lake Compressor Station is a natural gas compressor station.

What modifications/changes are proposed in this application? Add more rows as necessary.

Refer to Section 1 of this application.

Nearest town (in the same parish as the facility): Moss Lake

Parish(es) where facility is located: Calcasieu

Distance To (mi):	~18 Texas	~210 Arkansas	~125 Mississippi	~300 Alabama
Latitude of Facility Front Gate:	30 Deg	5 Min	32 Sec	62 Hundredths
Longitude of Facility Front Gate:	93 Deg	25 Min	16 Sec	80 Hundredths
Distance from nearest Class I Area:	435	kilometers		

Add physical address and description of location of the facility below. If the facility has no address, provide driving directions. Add more rows as necessary.

The Moss Lake Compressor Station will be in Calcasieu Parish, Louisiana, near the town of Moss Lake.
The location of the project site is on the west side of Moss Lake and north of Black Lake.

☒ Map attached (required per LAC 33:III.517.D.1)
☒ Description of processes and products attached (required per LAC 33:III.517.D.2)
☒ Introduction/Description of the proposed project attached (required per LAC 33:III.517.D.5)

3. Confidentiality [LAC 33.I.Chapter 5]

Are you requesting confidentiality for any information except air pollutant emission rates? ☐ Yes ☒ No

If "yes," list the sections for which confidentiality is requested below. Add rows as necessary. Confidentiality requests require a submittal that is separate from this application. Information for which confidentiality is requested should not be submitted with this application. Consult instructions.

4. Type of Application [LAC 33:III.517.D]

Check all that apply.

☐ Renewal

Select one, if applicable:
- ☒ Entirely new facility
- ☐ Significant modification of existing facility (may also include reconciliations) [LAC 33:III.527]
- ☐ Minor modification of existing facility (may also include reconciliations) [LAC 33:III.525]
- ☐ Reconciliation only

NSR Analysis:
- ☒ Prevention of Significant Deterioration (PSD)
- ☐ Nonattainment New Source Review (NNSR)

Does this submittal update or replace an application currently under review? ☐ Yes ☒ No

If yes, provide date that the prior application was submitted: _____

Select one if this application is for an existing facility that does not have an air quality permit:
- ☐ Previously Grandfathered (LAC 33:III.501.B.6)
- ☐ Previously Exempted (e.g., Small Source Exemption; LAC 33:III.501.B.2.d)
- ☐ Previously Unpermitted

5. Fee Information [LAC 33:III.517.D.17]

Fee Parameter: If the fee code is based on an operational parameter (such as number of employees or capital cost), enter that parameter here. _____

Industrial Category: Enter the Standard Industrial Classification (SIC) and North American Industry Classification (NAICS) Codes that apply to the facility.

Primary SICC: 4922 **NAICS Code:** 486210

Secondary SICC(s): _____

Project Fee Calculation: Enter fee code, permit type, production capacity/throughput, and fee amount pursuant to LAC 33:III.Chapter 2. Add rows to this table as needed. Include with the application the amount in the Grand Total blank as the permit application fee.

FEE CODE	TYPE	EXISTING CAPACITY	INCREMENTAL CAPACITY INCREASE	*SURCHARGES*				
				MULTIPLIER	NSPS	PSD	AIR TOXICS	TOTAL AMOUNT
1430	New	0	187,000	41.58	☐	☒	☐	$ 116,631.90
					GRAND TOTAL			$ 116,631.90

Optional **Fee Explanation:** Use the space provided to give an explanation of the fee determination displayed above. Using this area will help to avoid confusion.

Venture Global CP Express, LLC is submitting a permit fee in accordance with LAC 33:III.211.B.13.a. Accordingly, the new permit application fee ($41.58/100 HP) and 50% PSD surcharge were utilized to calculate the new permit application fee of $116,631.90. Per LAC 33:III.211.B.12, NSPS fees may be waived when a PSD application fee is imposed; therefore, the NSPS surcharge is not applied to the new permit application fee.

Detailed Fee Calculations

Proposed HP	= 187,000 HP
New Permit Application Fee	= $41.58/100 HP * 187,000 HP
	= $77,754.60
50% PSD Surcharge	= $38,877.30
Total Permit Application Fee	= **$116,631.90**

Electronic Fund Transfer (EFT): If paying the permit application fee using an Electronic Fund Transfer (EFT), please include the EFT Transaction Number, the Date that the EFT was made, and the total dollar amount submitted in the EFT. If not paying the permit application fee using EFT, leave blank.

EFT Transaction Number	**Date of Submittal**	**Total Dollar Amount**
		$

6. Key Dates

Estimated date construction will commence: Second Quarter of 2023

Estimated date operation will commence: Fourth Quarter of 2025

7. Pending Permit Applications – For Process Unit-Specific Permits Only [LAC 33:III.517.D.18]

List all other process units at this facility for which Part 70 permit applications have been submitted, but have not been acted upon by LDEQ as of the date of submittal of this application. If none, state "none" in the table. *****It is not necessary to update this table during the permit review process, unless requested by LDEQ.*****

Process Unit Name	Permit Number	Date Submitted
N/A		

8. LAC 33:I.1701 Requirements – Answer all below for new sources and permit renewals - ☒ Yes ☐ No

Does the company or owner have federal or state environmental permits identical to, or of a similar nature to, the permit for which you are applying in Louisiana or other states? (This requirement applies to all individuals, partnerships, corporations, or other entities who own a controlling interest of 50% or more in your company, or who participate in the environmental management of the facility for an entity applying for the permit or an ownership interest in the permit.)

☒ **Yes** ☐ **No**

If yes, list States: Louisiana

Do you owe any outstanding fees or final penalties to the Department? ☐ **Yes** ☒ **No**

If yes, explain below. Add rows if necessary.

Is your company a corporation or limited liability company? ☒ **Yes** ☐ **No**

If yes, attach a copy of your company's Certificate of Registration and/or Certificate of Good Standing from the Secretary of State. The appropriate certificate(s) should be attached to the end of this application as an appendix.

9. Permit Shield Request [LAC 33:III.517.E.7] - ☐ Yes ☒ No

If yes, check the appropriate boxes to indicate the type of permit shield being sought. Include the specific regulatory citation(s) for which the shield is being requested. Give an explanation of the circumstances that will justify the permit shield request. Attach additional pages if necessary. If additional pages are used, attach them directly behind this page and enter "See Attached Pages" into the Explanation field.

Type of Permit Shield request (check all that apply):

Non-applicability determination for:	Specific Citation(s)	Explanation
☐ 40 CFR 60		
☐ 40 CFR 61		
☐ 40 CFR 63		
☐ Prevention of Significant Deterioration		
☐ Nonattainment New Source Review		

Interpretation of monitoring, recordkeeping, and/or reporting requirements, and/or means of compliance for:	Specific Citation(s)	Explanation
☐ 40 CFR 60		
☐ 40 CFR 61		
☐ 40 CFR 63		
☐ Prevention of Significant Deterioration		
☐ Nonattainment New Source Review		
☐ State Implementation Plan (SIP) Regulation(s) referenced in 40 CFR 52 Subpart T		

10. Certification of Compliance With Applicable Requirements

Statement for Applicable Requirements for Which the Company and Facility Referenced In This Application Is In Compliance

Based on information and belief, formed after reasonable inquiry, the company and facility referenced in this application is in compliance with and will continue to comply with all applicable requirements pertaining to the sources covered by the permit application, as outlined in Tables 1 and 2 in the permit application. For requirements promulgated as of the date of this certification with compliance dates effective during the permit term, I further certify that the company and facility referenced in this application will comply with such requirements on a timely basis and will continue to comply with such requirements.

For corporations only: By signing this form, I certify that, in accordance with the definition of Responsible Official found in LAC 33:III.502, **(1)** I am a president, secretary, treasurer, or vice-president in charge of a principal business function, or other person who performs similar policy or decision-making functions; or **(2)** I am a duly authorized representative of such person; am responsible for the overall operation of one or more manufacturing, production, or operating facilities addressed in this permit application; and either the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or the delegation of authority has been approved by LDEQ prior to this certification.*

CERTIFICATION: I certify, under provisions in Louisiana and United States law which provide criminal penalties for false statements, that based on information and belief formed after reasonable inquiry, the statements and information contained in this Application for Approval of Emissions of Air Pollutants from Part 70 Sources, including all attachments thereto and the compliance statement above, are true, accurate, and complete.

a. Responsible Official		
Name Fory Musser		
Title Senior Vice President, Development		
Company Venture Global CP Express, LLC		
Suite, mail drop, or division Suite 1500		
Street or P.O. Box 1001 19th Street, North		
City Arlington	State VA	Zip 22209
Business phone (202) 759-6738		
Email Address fmusser@VENTUREGLOBALLNG.COM		

Signature of responsible official (See 40 CFR 70.2):
Date: July 27, 2022

*Approval of a delegation of authority can be requested by completing a Duly Authorized Representative Designation Form (Form_7218) available on LDEQ's website at http://deq.louisiana.gov/page/air-permit-applications

CERTIFICATION: I certify that the engineering calculations, drawings, and design are true and accurate to the best of my knowledge.

b. Professional Engineer		
Name Rahul Pendse, P.E.		
Title Principal Consultant		
Company Trinity Consultants, Inc.		
Suite, mail drop, or division Suite 900		
Street or P.O. Box 301 Main Street		
City Baton Rouge	State LA	Zip 70825
Business phone (225) 346-4003		
Email Address rpendse@trinityconsultants.com		

Signature of Professional Engineer:
Date: 07/28/2022
Louisiana Registration No. 44286

11. Personnel [LAC 33:III.517.D.1]

a. Manager of Facility who is located at plant site		
Name Fory Musser	☐Primary contact	
Title Senior Vice President, Development		
Company Venture Global CP Express, LLC.		
Suite, mail drop, or division Suite 1500		
Street or P.O. Box 1001 19th Street, North		
City Arlington	**State** VA	**Zip** 22209
Business phone (202) 759-6738		
Email address fmusser@VENTUREGLOBALLNG.COM		

b. On-site contact regarding air pollution control		
Name Fory Musser	☐Primary contact	
Title Senior Vice President, Development		
Company Venture Global CP Express, LLC.		
Suite, mail drop, or division Suite 1500		
Street or P.O. Box 1001 19th Street, North		
City Arlington	**State** VA	**Zip** 22209
Business phone (202) 759-6738		
Email address fmusser@VENTUREGLOBALLNG.COM		

c. Person to contact with written correspondence		
Name Fory Musser	☒Primary contact	
Title Senior Vice President, Development		
Company Venture Global CP Express, LLC.		
Suite, mail drop, or division Suite 1500		
Street or P.O. Box 1001 19th Street, North		
City Arlington	**State** VA	**Zip** 22209
Business phone (202) 759-6738		
Email address fmusser@VENTUREGLOBALLNG.COM		

d. Person who prepared this report		
Name Balaji Ganesan, PhD	☐Primary contact	
Title Managing Consultant		
Company Trinity Consultants, Inc.		
Suite, mail drop, or division Suite 900		
Street or P.O. Box 300 Main Street		
City Baton Rouge	**State** LA	**Zip** 70825
Business phone (225) 346-4003		
Email address bganesan@trinityconsultants.com		

e. Person to contact about Annual Maintenance Fees	☐ a ☐ b ☒ c ☐ d ☐ other (specify below)		
Name ☐Primary contact	**Suite, mail drop, or division**		
Title	**Street or P.O. Box**		
Company	**City**	**State**	**Zip**
Business Phone	**Email Address**		

12. Proposed Project Emissions [LAC 33:III.517.D.3]

List the total emissions following the proposed project for this facility or process unit (for process unit-specific permits). Speciate all criteria pollutants, TAP, and HAP for the proposed project.

Pollutant	Proposed Emission Rate (tons/yr)
PM_{10}	100.40
$PM_{2.5}$	100.40
SO_2	3.80
NO_X	323.45
CO	482.10
VOC	144.86
CO_2e	726,818
Acetaldehyde	0.25
Acrolein	0.040
Benzene	0.07
Ethylbenzene	0.20
Formaldehyde	4.25
Hydrogen sulfide	0.06
Naphthalene (and compounds)	0.05
n-Hexane	0.27
Polynuclear Aromatic Hydrocarbons	0.015
Propylene Oxide	0.15
Toluene	0.81
Xylene (mixed isomers)	0.41

13. History of Permitted Emissions [LAC 33:III.517.D.18]

List each of the following in chronological order:

- The Permit Number and Date Action Issued for each air quality permit that has been issued to this facility or process unit (for process unit-specific permits) within the last ten (10) years.
- All small source exemptions, authorizations to construct, administrative amendments, case-by-case insignificant activities, and changes of tank service that have been approved since the currently effective Title V Operating Permit or State Operating Permit was issued to this facility or process unit (for process unit-specific permits). It is not necessary to list any such activities issued prior to the issuance of the currently effective Title V Operating Permit or State Operating Permit, if one exists.

Permit Number	Date Action Issued
N/A	

14.a. Enforcement Actions [LAC 33:III.517.D.18] - ☐ Yes ☒ No

If yes, list all federal and state air quality enforcement actions, settlement agreements, and consent decrees received for this facility and/or process unit (for process unit-specific permits) since the issuance of the currently effective Title V Operating Permit or State Operating Permit. For each action, list the type of action (or its tracking number), the regulatory authority or authorities that issued the action, and the date that the action was issued. Summarize the conditions imposed by the enforcement action, settlement agreement, and consent decree in Section 22, Table 2. It is not necessary to submit a copy of the referenced action. Add rows to table as necessary.

Type of Action or Tracking Number	Issuing Authority	Date Action Issued	Summary of Conditions Included?
			☐ Yes ☐ No
			☐ Yes ☐ No

14.b. Schedule for Compliance [LAC 33:III.517.E.4] ☐ Yes ☒ No

If the facility or process unit for which application is being made is not in full compliance with all applicable regulations, give a description of how compliance will be achieved, including a schedule for compliance below. Add rows as necessary. See instructions.

15. Letters of Approval for Alternate Methods of Compliance - ☐ Yes ☒ No

If yes, list all correspondence with LDEQ, EPA, or other regulatory bodies that provides for or supports a request for alternate methods of compliance with any applicable regulations for this facility or process unit (for process unit-specific permits). List the date of issuance of the letter and the regulation referenced by the letter. **Attach as an appendix a copy of all documents referenced in this table.** Letters that are not included may not be incorporated into a final permit. Add rows to table as necessary.

Date Letter Issued	Issuing Authority	Referenced Regulation(s)	Copy of Letter Attached?
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No

16. Initial Notifications and Performance Tests [LAC 33:III.517.D.18] - ☐ Yes ☒ No

If yes, list any initial notifications that have been submitted or one-time performance tests that have been performed for this facility or process unit (for process unit-specific permits) since the issuance of the currently effective Title V Operating Permit or State Operating Permit in order to satisfy regulatory requirements. Any initial notification or one-time performance test requirements that have not been satisfied should be listed in Section 22, Table 2 of this application. Any notifications or performance tests that recur periodically should also be properly noted in Section 22, Table 2 of this application. Add rows to table as necessary.

Initial Notification or One-time Performance Test?	Regulatory Citation Satisfied	Applicable Source(s)	Date Completed/Approved

17. Existing Prevention of Significant Deterioration or Nonattainment New Source Review Limitations [LAC 33:III.517.D.18]

Do one or more emissions sources represented in this permit application currently operate under one or more NSR permits?
☐ Yes ☒ No

If "yes," summarize the limitations from such permit(s) in the following table. Add rows to table as necessary. Be sure to note any annual emissions limitations from such permit(s) in Section 13 of this application.

Permit Number	Date Issued	Emission Point ID No.	Pollutant	BACT/LAER Limit[1]	Averaging Period	Description of Control Technology/Work Practice Standards

[1]For example, lb/MM Btu, ppmvd @ 15% O_2, lb/ton, lb/hr

18. Air Quality Dispersion Modeling [LAC 33:III.517.D.15]

Was Air Quality Dispersion Modeling as required by LAC 33:III performed in support of this permit application? (Air Quality Dispersion Modeling is only required when applying for PSD permits and as requested by LDEQ.)
☒ Yes ☐ No

*Has Air Quality Dispersion Modeling completed in accordance with LAC 33:III ever been performed for this facility in support of an air permit application previously submitted for this facility or process unit (for process unit-specific permits) or as required by other regulations **AND** approved by LDEQ?*
☐ Yes ☒ No

If yes, enter the date the most recent Air Quality Dispersion Modeling results as required by LAC 33:III were submitted:

If the answer to either question above is "yes," enter a summary of the most recent results in the following table. If the answer to both questions is "no," enter "none" in the table. Add rows to table as necessary.

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Standard or (National Ambient Air Quality Standard {NAAQS})
Refer to Appendix G of this application.			

19. General Condition XVII Activities- ☒ Yes ☐ No

Enter all activities that qualify as Louisiana Air Emissions Permit General Condition XVII Activities.

- Expand this table as necessary to include all such activities.
- See instructions to determine what qualifies as a General Condition XVII Activity.
- Do not include emissions from General Condition XVII Activities in the proposed emissions totals for the permit application.

		Emission Rates – TPY							
Work Activity	Schedule	PM$_{10}$	PM$_{2.5}$	SO_2	NO_x	CO	VOC	H_2S	CO_2e
Misc. Venting from Filter Separators	20 events/yr						1.12		1,051
Pipeline Pigging	6 releases/lateral/yr						<0.01		3
Condensate Truck Loading	8,648 gal/yr						0.02		
Station Suction and Discharge Blowdowns	1 Station Suction Blowdown/yr per stack; 1 Station Discharge Blowdown/yr per stack						3.69	<0.01	3,531

20. Insignificant Activities [LAC 33:III.501.B.5] - ☒ Yes ☐ No

Enter all activities that qualify as Insignificant Activities.

- Expand this table as necessary to include all such activities.
- For sources claimed to be insignificant based on size or emission rate (LAC 33:III.501.B.5.A), information must be supplied to verify each claim. This may include but is not limited to operating hours, volumes, and heat input ratings.
- If aggregate emissions from all similar pieces of equipment claimed to be insignificant are greater than 5 tons per year for any pollutant, then the activities can not be claimed as insignificant and must be represented as permitted emission sources. Aggregate emissions shall mean the total emissions from a particular insignificant activity or group of similar insignificant activities (e.g., A.1, A.2, etc.) within a permit per year.

Emission Point ID No.	Description	Physical/Operating Data	Citation
-	Five (5) Emergency Generator Diesel Tanks	<10,000 gallons each	LAC 33:III.501.B.5.A.3
-	Two (2) Antifoam Storage Tanks	350 gallons each	LAC 33:III.501.B.5.A.3
-	Five (5) Lube Oil Storage Tanks	3,500 gallons each	LAC 33:III.501.B.5.A.3

21. Regulatory Applicability for Commonly Applicable Regulations – Answer all below [LAC 33:III.517.D.10]

Does this facility contain asbestos or asbestos containing materials? ☐ **Yes** ☒ **No**
If "yes," the facility or any portion thereof may be subject to 40 CFR 61, Subpart M, LAC 33:III.Chapter 27, and/or LAC 33:III.5151, and this application must address compliance as stated in Section 22 of this application

Is the facility or process unit represented in this permit subject to 40 CFR 68, or is any other process unit located at the same facility as the process unit represented in this application subject to 40 CFR 68? ☐ **Yes** ☒ **No**
If "yes," the entire facility is subject to 40 CFR 68 and LAC 33:III.Chapter 59, and this application must address compliance as stated in Section 22 of this application.

Is the facility listed in LAC 33:III.5611?

Table 5 ☐ **Yes** ☒ **No**

Table 6 ☐ **Yes** ☒ **No**

Table 7 ☐ **Yes** ☒ **No**

Does the applicant own or operate commercial refrigeration equipment normally containing more than 50 pounds of refrigerant at this facility or process unit? ☐ **Yes** ☒ **No**
If "yes," the entire facility is subject to 40 CFR 82, Subpart F, and this application must address compliance as stated in Section 22 of this application.

22. Applicable Regulations, Air Pollution Control Measures, Monitoring, and Recordkeeping

Important points for Table 1 [LAC 33:III.517.D.10]:

- List in Table 1, by Emission Point ID Number and Descriptive Name of the Equipment, state and federal pollution abatement programs and note the applicability or non-applicability of the regulations to each source.
- Adjust the headings for the columns in Table 1 as necessary to reflect all applicable regulations, in addition to any regulations that do not apply but require an explanation to substantiate this fact.
- For each piece of equipment, enter "1" for each regulation that applies. Enter "2" for each regulation that applies to this type of source, but from which this source of emissions is exempt. Enter "3" for equipment that is subject to a regulation, but does not have any applicable requirements. Also, enter "3" for each regulation that has applicable requirements that apply to the particular emission source, but the regulations currently do not apply due to meeting a specific criterion, such as it has not been constructed, modified, or reconstructed since the regulations have been in place.
- Leave the spaces blank when the regulations clearly would not apply under any circumstances to the source. For example, LAC 33:III.2103 – Storage of Volatile Organic Compounds would never apply to a steam generating boiler, no matter the circumstances.
- Consult instructions.

Important points for Table 2 [LAC 33:III.517.D.4; LAC 33:III.517.D.7; LAC 33:III.517.D.10]:

- For each piece of equipment listed in Table 2, include all applicable limitations, recordkeeping, reporting, monitoring, and testing requirements. Also, include any one-time notification or one-time performance test requirements that have not been fulfilled.
- Each of these regulatory aspects (limitations, recordkeeping, reporting, etc.) should be addressed for each regulation that is applicable to each emissions source or emissions point.
- For each regulation that provides a choice regarding the method of compliance, indicate the method of compliance that will be employed. It is not sufficient to state that all compliance options will be employed, though multiple compliance options may be approved as alternative operating scenarios.
- Consult instructions.

Important points for Table 3 [LAC 33:III.517.D.16]:

- Each time a 2 or a 3 is used to describe applicability of a source in Table 1, an entry should be made in Table 3 that explains the exemption or non-applicability status of the regulation to that source.
- Fill in all requested information in the table.
- The exact regulatory citation that provides for the specific exemption or non-applicability determination should be entered into the "Citation Providing for Exemption or Non-applicability" column.
- Consult Instructions.

Important points for Table 4 [LAC 33:III.517.D.18]

- List any single emission source that routes its emissions to another point where these emissions are commingled with the emissions of other sources before being released to the atmosphere. Do not list any single emission source in this table that does not route its emissions in this manner.
- List any and all emission sources that are routed as described above. This includes emission sources that do not otherwise appear in this permit application.
- Consult instructions.

Venture Global CP Express, LLC - Moss Lake Compressor Station

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point	Description	LAC 33.III								LAC 33.III.Chapter								
		509	2103	2104	2108	2111	2113	2115	2121	2	5	9	11	13	15	51	56	59
UNF0001	Facility Wide	1					1	3	3	1	1	1	1	1		3	1	3
ASCCT1	Aeroderivative Simple Cycle Combustion Turbine 1												3	1	3			
ASCCT2	Aeroderivative Simple Cycle Combustion Turbine 2												3	1	3			
ASCCT3	Aeroderivative Simple Cycle Combustion Turbine 3												3	1	3			
ASCCT4	Aeroderivative Simple Cycle Combustion Turbine 4												3	1	3			
ASCCT5	Aeroderivative Simple Cycle Combustion Turbine 5												3	1	3			
EGEN1	Emergency Generator 1 (Diesel)												1	1	3			
EGEN2	Emergency Generator 2 (Diesel)												1	1	3			
EGEN3	Emergency Generator 3 (Diesel)												1	1	3			
EGEN4	Emergency Generator 4 (Diesel)												1	1	3			
EGEN5	Emergency Generator 5 (Diesel)												1	1	3			
FUG01	Fugitive Emissions					1			3									
TK01	Condensate Storage Tank No. 1		2	3														

KEY TO MATRIX

1 (Applicable) The regulations have applicable requirements that apply to this particular emissions source. This includes any monitoring, recordkeeping, or reporting requirements.
2 (Exempt) The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.
3 (Does Not Apply) The regulations do not apply to this emissions source. The regulations may have applicable requirements that could apply to this emissions source but the requirements do not currently apply to the source due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place.

Blank – The regulations clearly do not apply to this type of emission source.

Venture Global CP Express, LLC - Moss Lake Compressor Station

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point	Description	40 C.F.R. Part 60 NSPS									40 C.F.R. Part 63 NESHAP							40 C.F.R. Part					
		A	D	Db	Dc	GG	Kb	IIII	KKKK	OOOOa	A	Y	HH	HHH	EEEE	YYYY	ZZZZ	52	64	68	70	72	82
UNF0001	Facility Wide	1									1		3	3	3					3			1
ASCCT1	Aeroderivative Simple Cycle Combustion Turbine 1	1				2		3	1	3						3			2				
ASCCT2	Aeroderivative Simple Cycle Combustion Turbine 2	1				2		3	1	3						3			2				
ASCCT3	Aeroderivative Simple Cycle Combustion Turbine 3	1				2		3	1	3						3			2				
ASCCT4	Aeroderivative Simple Cycle Combustion Turbine 4	1				2		3	1	3						3			2				
ASCCT5	Aeroderivative Simple Cycle Combustion Turbine 5	1				2		3	1	3						3			2				
EGEN1	Emergency Generator 1 (Diesel)	1						1									1						
EGEN2	Emergency Generator 2 (Diesel)	1						1									1						
EGEN3	Emergency Generator 3 (Diesel)	1						1									1						
EGEN4	Emergency Generator 4 (Diesel)	1						1									1						
EGEN5	Emergency Generator 5 (Diesel)	1						1									1						
FUG01	Fugitive Emissions									1													
TK01	Condensate Storage Tank No. 1						3			3													

KEY TO MATRIX

1 (Applicable) The regulations have applicable requirements that apply to this particular emissions source. This includes any monitoring, recordkeeping, or reporting requirements.
2 (Exempt) The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.
3 (Does Not Apply) The regulations do not apply to this emissions source. The regulations may have applicable requirements that could apply to this emissions source but the requirements do not currently apply to the source due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place.

Blank – The regulations clearly do not apply to this type of emission source.

TABLE 2. STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
UNF0001	40 C.F.R. Part 60 Subpart A - General Provisions	**Requirements that limit emissions or operations-**			
		Comply with all applicable requirements to limit emissions or operations specified in 40 C.F.R. Part 60 Subpart A.	40 C.F.R. § 60.11 and § 60.18	N/A	No
		Requirements that specify monitoring-			
		Comply with all applicable monitoring requirements of 40 C.F.R. Part 60 Subpart A.	40 C.F.R. § 60.13	N/A	No
		Requirements that specify records to be kept and requirements that specify record retention time-			
		Maintain all applicable records as required by 40 C.F.R Part 60 Subpart A.	40 C.F.R. § 60.7	N/A	No
		Requirements that specify reports to be submitted-			
		Submit all applicable reports as required by 40 C.F.R. Part 60 Subpart A.	40 C.F.R § 60.7 and § 60.19	N/A	No
		Requirements that specify performance testing-			
		Conduct applicable tests according to 40 C.F.R. § 60.8.	40 C.F.R. § 60.8	N/A	No
	40 C.F.R. Part 63 Subpart A - General Provisions	**Requirements that limit emissions or operations-**			
		Comply with all applicable requirements to limit emissions or operations specified in 40 C.F.R. Part 63 Subpart A.	40 C.F.R. § 63.6 and § 63.11	N/A	No
		Requirements that specify monitoring-			
		Comply with all applicable monitoring requirements of 40 C.F.R. Part 63 Subpart A.	40 C.F.R. § 63.8	N/A	No
		Requirements that specify records to be kept and requirements that specify record retention time-			
		Maintain all applicable records as required by 40 C.F.R. Part 63 Subpart A.	40 C.F.R. § 63.10	N/A	No
		Requirements that specify reports to be submitted-			
		Submit all applicable reports as required by 40 C.F.R. Part 63 Subpart A.	40 C.F.R. § 63.9 and § 63.10	N/A	No
		Requirements that specify performance testing-			
		Conduct applicable tests according to 40 C.F.R. § 63.7.	40 C.F.R. § 63.7	N/A	No
	40 C.F.R. Part 82 - Stratospheric Ozone Provisions	**Requirements that limit emissions or operations-**			
		Comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.	40 C.F.R. 82 Subpart B, E, and F	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted -			
		N/A	N/A	N/A	N/A
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A
	LAC 33:III Chapter 2 - Rules and Regulations for the Fee System of the Air Quality Control Programs	**Requirements that limit emissions or operations-**			
		Shall pay the prescribed application fee or annual fee, as determined by LAC 33:III.223, within 90 days after the due date.	LAC 33:III.219	90 Days After Application Due Date	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted -			
		N/A	N/A	N/A	N/A
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A

TABLE 2. STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
UNF0001 (continued)	LAC 33:III Chapter 5 - Permit Procedures	**Requirements that limit emissions or operations-**			
		No construction, modification, or operation of a facility which ultimately may result in an initiation or increase in emission of air contaminants as defined in LAC 33:III.111 shall commence until the appropriate permit fee has been paid and a permit has been issued by the permitting authority.	LAC 33:III.501.C.2	N/A	No
		Operate in accordance with all terms and conditions of the permit.	LAC 33:III.501.C.4	N/A	No
		Comply with the terms and conditions of the permit to ensure compliance with all state and federally applicable air quality requirements and standards at the source, and other permit terms and conditions as determined by the permitting authority to be reasonable and necessary.	LAC 33:III.501.C.6	N/A	No
		Comply with the Part 70 General Conditions as set forth in LAC 33:III.535 and the Louisiana General Conditions as set forth in LAC 33:III.537.	LAC 33:III.535 and LAC 33:III.537	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted-			
		Submit a timely and complete permit application to the Office of Environmental Services as required in accordance with the procedures in LAC 33:III Chapter 5. Permit applications must be submitted prior to construction, reconstruction, or modification unless otherwise provided in LAC 33:III Chapter 5.	LAC 33:III.501.C.1	N/A	No
		The owner or operator of any new source which will constitute a Part 70 source and for which construction will commence after the effective date of the Louisiana Part 70 program shall submit a permit application prior to construction and pursuant to LAC 33:III.517. The application shall include all information required for applications pertaining to a Part 70 source. Construction shall not begin prior to approval by the permitting authority. Such approval may be provided either by authorization to construct in accordance with LAC 33:III.501.C.3 or by issuance of the permit.	LAC 33:III.507.C.2	N/A	No
		The approval to construct shall become invalid for Phase 1 if the construction of Phase 1 is not commenced within 18 months of the effective date of the approval to construct; and the approval to construct shall become invalid for Phase 2 if the construction of Phase 2 is not commenced within 18 months of the completion of the construction of Phase 1, provided that the BACT determination for Phase 2 shall be reviewed and modified as appropriate if Phase 2 construction commences later than 18 months after the effective date of the original approval to construct.	LAC 33:III.509.R.2	N/A	No
		Any permit application to renew an existing permit shall be submitted at least six months prior to the date of permit expiration, or at such earlier time as may be required by the existing permit or approved by the DEQ. In no event shall the application for permit renewal be submitted more than 18 months before the date of permit expiration.	LAC 33:III.507.E	Six Months Prior to Date of Permit Expiration	No
		The requirements of LAC 33:III.509 apply to the construction of any new *major stationary source* , as defined in Subsection B of this Section, or any project at an existing *major stationary source* in an area designated as attainment or unclassifiable under Sections 107(d)(1)(A)(ii) or (iii) of the Clean Air Act.	LAC 33:III.509.A.1	N/A	No
		Any permit application pertaining to a new or modified source shall be submitted prior to commencement of construction, reconstruction, or modification of the source. Construction, reconstruction, or modification of any source required to be permitted under this Chapter shall not commence prior to approval by the permitting authority.	LAC 33:III.517.A.1	N/A	No
		Any application form, report, or compliance certification submitted under LAC 33:III.Chapter 5 shall contain certification by a responsible official of truth, accuracy, and completeness. The certification shall state that, based on information and belief formed after reasonable enquiry, the statements and information contained in the application are true, accurate, and complete.	LAC 33:III.517.B.1	N/A	No
		Any application pertaining to a Part 70 source shall include a compliance certification and provisions for future compliance certifications.	LAC 33:III.517.B.2	N/A	No

TABLE 2. STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
UNF0001 (continued)	LAC 33:III Chapter 5 - Permit Procedures (continued)	Duty to Supplement or Correct. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.	LAC 33:III.517.C	N/A	No
		Shall submit permit applications in accordance with LDEQ-provided forms and guidance. At a minimum, each permit application submitted per LAC 33:III.Chapter 5 shall contain the information specified in LAC 33:III.517.D, Subparagraphs 1-18. Also, for Part 70 sources, the information as specified in LAC 33:III.517.E.1 through E.8 shall be included, as applicable.	LAC 33:III.517.D through E	N/A	No
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A
	LAC 33:III Chapter 9 - General Regulations on Control of Emissions and Emission Standards	**Requirements that limit emissions or operations-**			
		No person or group of persons shall allow particulate matter or gases to become airborne in amounts which cause the ambient air quality standards to be exceeded. The limits stated include normal background levels of particulates and gases.	LAC 33:III.929.A	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted-			
		Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 30th of April to the Office of Environmental Services, for the reporting period of the previous calendar year that coincides with period of ownership or operatorship, until released from reporting, in writing, by DEQ. Submit both an emissions inventory and the certification statement required by LAC 33:III.919.F.1.c, separately for each AI, in a format specified by DEQ. To request a release from reporting, submit a completed Request for Release from Emissions Inventory Reporting form (form# 7365) to the Office of Environmental Services.	LAC 33:III.919	Annually	No
		Shall report the unauthorized discharge of any air pollutant into the atmosphere in accordance with LAC 33:I.Chapter 39. Submit written reports to the department pursuant to LAC 33:I.3925. Submit timely and appropriate follow-up reports detailing methods to be used to prevent similar atmospheric releases.	LAC 33:III.927	Upon Occurrence of an Unauthorized Discharge	No
		Requirements that specify performance testing-			
		New sources shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.	LAC 33:III.913	N/A	No
	LAC 33:III Chapter 11 - Control of Emissions of Smoke	**Requirements that limit emissions or operations-**			
		Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairing visibility as defined in LAC 33:III.111 or intensifying an existing traffic hazard condition are prohibited.	LAC 33:III.1103	N/A	No
		Outdoor burning of waste material or other combustible material is prohibited, except as provided in Subsections C and D of LAC 33:III.1109.B.	LAC 33:III.1109.B	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted -			
		N/A	N/A	N/A	N/A
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A

TABLE 2. STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
UNF0001 (continued)	LAC 33:III Chapter 13 - Emission Standards for Particulate Matter	**Requirements that limit emissions or operations-**			
		Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.	LAC 33:III.1303.B	N/A	No
		All reasonable precautions shall be taken to prevent particulate matter from becoming airborne. These precautions shall include but not be limited to the items listed in LAC 33.III.1305.A.1 through A.7.	LAC 33:III.1305	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted -			
		N/A	N/A	N/A	N/A
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A
	LAC 33:III Chapter 21 - Control of Emission of Organic Compounds	**Requirements that limit emissions or operations-**			
		Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5.	LAC 33:III.2113.A	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted -			
		N/A	N/A	N/A	N/A
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A
	LAC 33:III Chapter 56 - Prevention of Air Pollution Emergency Episodes	**Requirements that limit emissions or operations-**			
		During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by DEQ to enforce these regulations.	LAC 33:III.5611.B.1	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted-			
		Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency: Due within 30 days after requested by DEQ.	LAC 33:III.5611.A	N/A	No
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A

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TABLE 2. STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
ASCCT1 - ASCCT5	40 C.F.R. Part 60 Subpart A - General Provisions	**Requirements that limit emissions or operations-**			
		Comply with all applicable requirements to limit emissions or operations specified in 40 C.F.R. Part 60 Subpart A.	40 C.F.R. § 60.11 and § 60.18	N/A	No
		Requirements that specify monitoring-			
		Comply with all applicable monitoring requirements of 40 C.F.R. Part 60 Subpart A.	40 C.F.R. § 60.13	N/A	No
		Requirements that specify records to be kept and requirements that specify record retention time-			
		Maintain all applicable records as required by 40 C.F.R. Part 60 Subpart A.	40 C.F.R. § 60.7	N/A	No
		Requirements that specify reports to be submitted-			
		Submit all applicable reports as required by 40 C.F.R. Part 60 Subpart A.	40 C.F.R. § 60.7 and § 60.19	N/A	No
		Requirements that specify performance testing-			
		Conduct applicable tests according to 40 C.F.R. § 60.8.	40 C.F.R. § 60.8	N/A	No
	40 C.F.R. Part 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines	**Requirements that limit emissions or operations-**			
		For high load operation (>= 75% load): NOx <= 25 ppm @ 15% O_2 or 150 ng/J of useful output (1.2 lb/MWh). **For low load operation (< 75% load):** NOx <= 150 ppm @ 15% O_2 or 1,100 ng/J of useful output (8.7 lb/MWh).	40 C.F.R § 60.4320 and 40 C.F.R Part 60 Subpart KKKK Table 1	Hourly average	No
		Shall comply with either of the following conditions: (1) Do not cause to be discharged into the atmosphere from the stationary combustion turbine any gases which contain SO_2 in excess of 110 ng/J (0.90 lb/MWh) gross output; or (2) Do not burn in the stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input. If the turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	40 C.F.R § 60.4330(a)(1) and (a)(2)	N/A	No
		Operate and maintain the stationary combustion turbines, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.	40 C.F.R § 60.4333(a)	N/A	No

TABLE 2. STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
ASCCT1 - ASCCT5 (continued)	40 C.F.R. Part 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines (continued)	**Requirements that specify monitoring-**			
		As an alternative to 40 C.F.R § 60.4340(a), nitrogen oxides monitored by continuous emission monitor (CEM) continuously as described in 40 C.F.R. 60.4335(b) and 40 C.F.R. 60.4345.	40 C.F.R § 60.4340(b)(1)	N/A	No
		Fuel sulfur content monitored by the regulation's specified method(s) at the regulation's specified frequency, except as provided in 40 C.F.R. 60.4365. Monitor the total sulfur content of the fuel being fired in the turbine using the total sulfur methods described in 40 C.F.R. 60.4415 at the frequency specified in 40 C.F.R. 60.4370.	40 C.F.R § 60.4360	As specified in 40 C.F.R § 60.4370	No
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted-			
		For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under subpart KKKK, submit reports of excess emissions and monitor downtime, in accordance with 40 C.F.R § 60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.	40 C.F.R § 60.4375(a)	Within 30 Days	No
		Submit performance test results: Due in writing before the close of business on the 60th day following the completion of the performance test.	40 C.F.R § 60.4375(b)	Within 60 Days	No
		Postmark the excess emissions report required under 40 C.F.R. 60.7(c) by the 30th day following the end of each 6-month period.	40 C.F.R § 60.4395	Within 30 Days	No
		Requirements that specify performance testing-			
		Conduct an initial NO_X performance test, as required in 40 C.F.R. § 60.8. Subsequent NO_X performance tests must be conducted on an annual basis (no more than 14 calendar months following the previous performance test). If the NO_X emission result from the performance test is less than or equal to 75 percent of the NO_X emission limit for the turbine, the frequency of subsequent performance tests may be reduced to once every 2 years (no more than 26 calendar months following the previous performance test). If results of any subsequent performance test exceed 75 percent of the NO_X emission limit for the turbine, annual performance tests must be resumed. If a NO_X-diluent CEMS is installed, the initial performance test may be performed using the alternative method in 40 C.F.R. § 60.4405.	40 C.F.R. § 60.4340(a), 40 C.F.R. § 60.4400(a), 40 C.F.R. § 60.4405	Annually, unless qualifies for reduced testing per rule	No
		Conduct an initial performance test for NO_X, as required in 40 C.F.R. 60.8. Use one methodologies specified in 40 C.F.R. 60.4400(a)(1)(i) and (a)(1)(ii). If using a NO_X diluent CEMS according to 40 C.F.R. 60.4345, then the test may be performed as specified in 40 C.F.R. 60.4405(a) through (d).	40 C.F.R. § 60.4400	N/A	No
		Conduct an initial SO_2 performance test, as required in 40 C.F.R § 60.8. Subsequent SO_2 performance tests must be conducted on an annual basis (no more than 14 calendar months following the previous performance test). Use one of the methodologies specified in 40 C.F.R. 60.4415(a)(1) through (a)(3).	40 C.F.R § 60.4415	Annually	No
	LAC 33:III Chapter 13 - Emission Standards for Particulate Matter	**Requirements that limit emissions or operations-**			
		Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.	LAC 33:III.1311.C	6 Minutes in any 60 Minute Consecutive Period	No
		Emissions of particulate matter from any fuel burning equipment cannot exceed 0.6 lbs/MMBTU of heat input.	LAC 33:III.1313.C	3-hour Average	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted -			
		N/A	N/A	N/A	N/A
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A

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TABLE 2. STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
EGEN1 - EGEN5	40 C.F.R. Part 60 Subpart A - General Provisions	**Requirements that limit emissions or operations-**			
		Comply with all applicable requirements to limit emissions or operations specified in 40 C.F.R. Part 60 Subpart A.	40 C.F.R. § 60.11 and 60.18	N/A	No
		Requirements that specify monitoring-			
		Comply with all applicable monitoring requirements of 40 C.F.R. Part 60 Subpart A.	40 C.F.R. § 60.13	N/A	No
		Requirements that specify records to be kept and requirements that specify record retention time-			
		Maintain all applicable records as required by 40 C.F.R. Part 60 Subpart A.	40 C.F.R. § 60.7	N/A	No
		Requirements that specify reports to be submitted-			
		Submit all applicable reports as required by 40 C.F.R. Part 60 Subpart A.	40 C.F.R. § 60.7 and 60.19	N/A	No
		Requirements that specify performance testing-			
		Conduct applicable tests according to 40 C.F.R. § 60 Subpart A.	40 C.F.R. § 60.8	N/A	No
	40 C.F.R. Part 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	**Requirements that limit emissions or operations-**			
		Comply with the NMHC + NO_X, CO, and PM emission limitations set forth in Table 1 for the highest tier of the appropriate sized engine. All emergency generators are subject to the following standards: • CO limit of 3.5 g/kW-hr • PM limit of 0.20 g/kW-hr • NMHC + NO_X limit of 6.4 g/kW-hr	40 C.F.R. § 60.4202(a)(2) and 40 C.F.R. 1039 Appendix I	Per underlying test method	No
		For the emergency generators: exhaust opacity from CI nonroad engines (excluding single-cylinder engines, propulsion marine diesel engines, and constant speed engines) may not exceed: • 20% during the acceleration mode; • 15% during the lugging mode; and • 50% during the peaks in either the acceleration or lugging modes.	40 C.F.R. § 60.4202(a)(2) and 40 C.F.R. § 1039.105	Per 40 C.F.R. § 60. 4202(a)(2)	No
		Comply with the emission standards for new nonroad CI engines in 40 C.F.R. 60.4202, for all pollutants, for the same model year and maximum engine power.	40 C.F.R. § 60.4205(b)	Per underlying test method	No
		Operate and maintain stationary CI ICE that achieve the emission standards as required in 40 C.F.R. § 60.4204 and 40 C.F.R. § 60.4205 over the entire life of the engine.	40 C.F.R. § 60.4206	N/A	No
		Use diesel fuel that meets the requirements of 40 C.F.R. § 1090.305 for nonroad diesel fuel.	40 C.F.R. § 60.4207(b) and 40 C.F.R. § 1090.305	Continuously	No
		If the emergency stationary CI internal combustion engine does not meet the standards applicable to non-emergency engines, install a non-resettable hour meter prior to startup of the engine.	40 C.F.R. § 60.4209(a)	N/A	No
		Except as permitted under 40 C.F.R. § 60.4211(g), operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions, change only those emission related settings that are permitted by the manufacturer, and meet the requirements of 40 C.F.R. Part 1068, as they apply.	40 C.F.R. § 60.4211(a)	N/A	No
		Purchase an engine certified to the emission standards in 40 C.F.R. § 60.4204(b), 60.4205(b), or 60.4205(c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 C.F.R. 60.4211(g).	40 C.F.R. § 60.4211(c)	N/A	No
		Operate according to the requirements in 40 C.F.R. § 60.4211(f)(1), (f)(2)(i), and (f)(3). In order for the engine to be considered an emergency stationary ICE under 40 C.F.R. 60 Subpart IIII, any operation other than as described in 40 C.F.R. § 60.4211(f)(1), (f)(2)(i), and (f)(3) is prohibited. If the engine is not operated according to these requirements, the engine will not be considered an emergency engine under 40 C.F.R. 60 Subpart IIII and must meet all requirements for non-emergency engines.	40 C.F.R. § 60.4211(f)	N/A	No
		Comply with applicable requirements in Table 8 to Subpart IIII of Part 60.	40 C.F.R. § 60.4218, Table 8 to Subpart IIII of Part 60	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A

TABLE 2. STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
EGEN1 - EGEN5 (continued)	40 C.F.R. Part 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (continued)	**Requirements that specify records to be kept and requirements that specify record retention time -**			
		Operating time recordkeeping by electronic or hard copy upon occurrence of event. If the emergency engine meets the standards applicable to emergency engines in the applicable model year, keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. Record the time of operation of the engine and the reason the engine was in operation during that time.	40 C.F.R. § 60.4214(b)	N/A	No
		Requirements that specify reports to be submitted -			
		N/A	N/A	N/A	N/A
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A
	40 C.F.R. Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	**Requirements that limit emissions or operations-**			
		New RICE located at an area source must meet the requirements of 40 C.F.R. Part 63 Subpart ZZZZ by meeting the requirements of 40 C.F.R. Part 60 Subpart IIII. No further requirements apply under Subpart ZZZZ.	40 C.F.R. § 63.6590(c)(1)	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted -			
		N/A	N/A	N/A	N/A
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A
	LAC 33:III Chapter 11 - Control of Emissions of Smoke	**Requirements that limit emissions or operations-**			
		Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. Determine opacity by using Method 9 of 40 C.F.R. Part 60, Appendix A or by using a continuous opacity monitoring system (COMS) meeting the requirements outlined in 40 C.F.R. § 60.13(c) and (d).	LAC 33:III.1101.B	6 Minutes in any 60 Minute Consecutive Period	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted -			
		N/A	N/A	N/A	N/A
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A
	LAC 33:III Chapter 13 - Emission Standards for Particulate Matter	**Requirements that limit emissions or operations-**			
		Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.	LAC 33:III.1311.C	6 Minutes in any 60 Minute Consecutive Period	No
		Emissions of particulate matter from any fuel burning equipment cannot exceed 0.6 lbs/MMBTU of heat input.	LAC 33:III.1313.C	3-hour Average	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted -			
		N/A	N/A	N/A	N/A
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A

TABLE 2. STATE AND FEDERAL AIR QUALITY REQUIREMENTS

Emission Point ID No.:	Applicable Requirement	Compliance Method/Provision	Compliance Citation	Averaging Period/Frequency	State Only Requirement
FUG01	LAC 33:III Chapter 21: Control of Emission of Organic Compounds - Pumps and Compressors	**Requirements that limit emissions or operations-**			
		All rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions shall be equipped with mechanical seals or other equivalent equipment or means as may be approved by the administrative authority.	LAC 33:III.2111	N/A	No
		Requirements that specify monitoring -			
		N/A	N/A	N/A	N/A
		Requirements that specify records to be kept and requirements that specify record retention time -			
		N/A	N/A	N/A	N/A
		Requirements that specify reports to be submitted -			
		N/A	N/A	N/A	N/A
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A
	40 C.F.R Part 60 Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	**Requirements that limit emissions or operations-**			
		Note: As a result of Congressional Review Act (CRA) resolution, the proposed Moss Lake Compressor Station is subject to the methane and VOC requirements published in 40 C.F.R .Part 60, Subpart OOOOa: 81 FR 35898 (Jun. 3, 2016) and as amended at 83 FR 10638 (Mar. 12, 2018) (2016 NSPS OOOOa). Accordingly, CP Express performed the regulatory review of 40 C.F.R Part 60 Subpart OOOOa based on the regulatory text as it was published in the 2016 NSPS OOOOa. Therefore, the regulatory text and citations are consistent with the 2016 NSPS OOOOa.			
		Include in the fugitive emissions monitoring plan the elements specified in 40 § C.F.R. 60.5397a(c)(1) through (c)(8) and (d)(1) through (d)(4) as applicable.	40 C.F.R. § 60.5397a(c) 40 C.F.R. § 60.5397a(d)	N/A	No
		Develop an emissions monitoring plan that covers the collection of fugitive emissions components within each company-defined area in accordance with 40 C.F.R. § 60.5397a(c) and (d).	40 C.F.R. § 60.5397a(b)	N/A	No
		Each monitoring survey must include each fugitive emissions component, as defined in 40 C.F.R. § 60.5430a, for fugitive emissions.	40 C.F.R. § 60.5397a(e)	N/A	No
		Requirements that specify monitoring -			
		Conduct an initial monitoring survey within 60 days of startup of a new compressor station for each new collection of fugitive emissions components at the new compressor station as specified.	40 C.F.R. § 60.5397a(f)(2)	within 60 days of startup	No
		A monitoring survey of the collection of fugitive emissions components must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart.	40 C.F.R. § 60.5397a(g)(2)	Quarterly	No
		Difficult to monitor components: Fugitive emissions components that are designated difficult-to-monitor must meet the specifications of 40 C.F.R. § 60.5397a(g)(3)(i) through (iv).	40 C.F.R. § 60.5397a(g)(3)	N/A	No
		Unsafe to monitor components: Fugitive emissions components that are designated unsafe-to--monitor must meet the specifications of 40 C.F.R. § 60.5397a(g)(4)(i) through (iv).	40 C.F.R. § 60.5397a(g)(4)	N/A	No
		Repair or replace each identified source of fugitive emissions as soon as practicable but no later than 30 calendar days after detection of the fugitive emissions.	40 C.F.R. § 60.5397a(h)(1)	within 30 calendar days after detection	No
		If the repair or replacement is technically infeasible, would require a compressor station shutdown or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next scheduled compressor station shutdown or within 2 years, whichever is earlier.	40 C.F.R. § 60.5397a(h)(2)	N/A	No
		Resurvey the repaired or replaced fugitive emissions component as soon as practicable, but no later than 30 days after being repaired to ensure that there are no fugitive emissions.	40 C.F.R. § 60.5397a(h)(3)	within 30 calendar days after repair	No
		Requirements that specify records to be kept and requirements that specify record retention time -			
		Maintain records as specified in 40 C.F.R. § 60.5420a(c)(15).	40 C.F.R. § 60.5397a(i)	N/A	No
		Requirements that specify reports to be submitted -			
		Annual reports shall be submitted for each collection of fugitive emissions components that include the information specified in 40 C.F.R. § 60.5420a(b)(7).	40 C.F.R. § 60.5397a(j)	N/A	No
		Submit annual report: Due initially no later than 90 days after the end of the initial compliance period, as determined according to 40 C.F.R. § 60.5410a. Submit subsequent annual reports no later than the same date each year as the initial annual report. Include the general information specified in 40 C.F.R. § 60.5420a(b)(1)(i) through (b)(1)(iv) and the monitoring survey records information specified in 40 C.F.R. § 60.5420a(b)(7)(i) through (b)(7)(xii).	40 C.F.R. § 60.5420a(b)	N/A	No
		Requirements that specify performance testing -			
		N/A	N/A	N/A	N/A

TABLE 3. EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
UNF0001	Chapter 21: Control of Emission of Organic Compounds - Waste Gas Disposal	Does Not Apply	The facility does not generate any *"waste gas stream"* as defined under LAC 33:III.2115.N	LAC 33:III.2115.N
	Chapter 21: Control of Emission of Organic Compounds - Fugitive Emission Control	Does Not Apply	The facility is not an affected natural gas processing plant as defined under the regulation.	LAC 33:III.2121.A
	Chapter 51: Comprehensive Toxic Air Pollutant Emission Control Program	Does Not Apply	Facility-wide TAP emissions are less than the TAP major source threshold of 10 TPY (individual) / 25 TPY (aggregate).	LAC 33:III.5101.A
	Chapter 59: Chemical Accident Prevention and Minimization of Consequences	Does Not Apply	The facility does not produce, process, handle, or store any referenced list substance greater than the threshold amounts.	LAC 33:III.5907
	Chemical Accident Prevention Provisions [40 C.F.R. Part 68]	Does Not Apply	The facility does not produce, process, handle, or store any referenced list substance greater than the threshold amounts.	40 C.F.R. § 68.130
	NESHAP Subpart HHH - National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities [40 C.F.R. Part 63 Subpart HHH]	Does Not Apply	The facility emits less than 10 TPY of a single HAP/25 TPY of total HAPs and, therefore, is not a major source of HAPs.	40 C.F.R. § 63.1270(a)
	NESHAP Subpart HH - National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities [40 C.F.R. Part 63 Subpart HH]	Does Not Apply	The facility is not a Natural Gas Production facility.	40 C.F.R. § 63.760
	NESHAP Subpart EEEE - National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline) [40 C.F.R. Part 63 Subpart EEEE]	Does Not Apply	The facility emits less than 10 TPY of a single HAP/25 TPY of total HAPs and, therefore, is not a major source of HAPs.	40 C.F.R. § 63.2334(a)

TABLE 3. EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
ASCCT1 - ASCCT5	NSPS Subpart GG - Standards of Performance for Stationary Gas Turbines [40 C.F.R. Part 60 Subpart GG]	Exempt	Turbines that are subject to 40 C.F.R. Part 60, Subpart KKKK are exempt from the requirements of Subpart GG.	40 C.F.R. § 60.4305(b)
	NSPS Subpart IIII - Standards of Performance for Stationary [40 C.F.R. Part 60 Subpart IIII]	Does Not Apply	Combustion turbines are excluded from the definition of "*stationary internal combustion engine.*"	40 C.F.R. § 60.4219
	NSPS Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 [40 C.F.R. Part 60 Subpart OOOOa]	Does Not Apply	The centrifugal compressors associated with the turbines will have dry seals. Thus, the centrifugal compressors will not be subject to 40 C.F.R. § 60.5380a(a) through (d) which requires that methane and VOC emissions be reduced from each centrifugal compressor wet seal fluid degassing system.	40 C.F.R. § 60.5365a(b)
	NESHAP Subpart YYYY - National Emission Standards for Hazardous Air Pollutants For Stationary Combustion Turbines [40 C.F.R. Part 63 Subpart YYYY]	Does Not Apply	40 C.F.R. Part 63 Subpart YYYY does not apply to area sources of HAP.	40 C.F.R. § 63.6085
	Compliance Assurance Monitoring [40 C.F.R. Part 64]	Exempt	For NOx, the turbines are subject to emission limitation requirements under 40 C.F.R. Part 60 Subpart KKKK.	40 C.F.R. § 64.2(b)(1)(i)
	Control of Emissions of Smoke [LAC 33:III.Chapter 11]	Does Not Apply	Requirement does not apply to combustion units when combusting only natural gas, carbon monoxide, hydrogen, and/or other gaseous fuels with a carbon to hydrogen molecular ratio of less than 0.34. For mixtures of gaseous fuels, the molecular ratio shall be computed based on the volume percent (at standard conditions) of carbon monoxide, hydrogen, and each organic compound in the fuel gas stream.	LAC 33:III.1107.B.1
	Emission Standards for Sulfur Dioxide [LAC 33:III.Chapter 15]	Does Not Apply	Each unit emits less than 5 TPY of sulfur dioxide. Shall record and retain data to show annual potential emissions from each unit.	LAC 33:III.1502.A.3 and 1513.C
EGEN1 - EGEN5	Emission Standards for Sulfur Dioxide [LAC 33:III.Chapter 15]	Does Not Apply	Each unit emits less than 5 TPY of sulfur dioxide. Shall record and retain data to show annual potential emissions from each unit.	LAC 33:III.1502.A.3 and 1513.C

TABLE 3. EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE

Emission Point ID No:	Requirement	Exempt or Does Not Apply	Explanation	Citation Providing for Exemption or Non-applicability
FUG01	Control of Emission of Organic Compounds - Fugitive Emission Control [LAC 33:III.Chapter 21]	Does Not Apply	The facility is not an affected natural gas processing plant as defined under the regulation.	LAC 33:III.2121.A
TK01	Control of Emission of Organic Compounds - Storage of Volatile Organic Compounds [LAC 33:III.Chapter 21]	Exempt	Tank has a normal storage capacity of less than 420,000 gallons and stores condensate.	LAC 33:III.2103.G.1
	Control of Emission of Organic Compounds - Crude Oil and Condensate [LAC 33:III.Chapter 21]	Does Not Apply	The potential to emit flash gas emissions is less than 100 TPY; therefore, requirements do not apply.	LAC 33:III.2104.A
	NSPS Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels [40 C.F.R. Part 60 Subpart Kb]	Does Not Apply	Tank has a storage capacity of less than 75 m^3.	40 C.F.R. § 60.110b(a)
	NSPS Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 [40 C.F.R. Part 60 Subpart OOOOa]	Does Not Apply	The potential for VOC emissions is less than 6 TPY.	40 C.F.R. § 60.5365a(e)

Venture Global CP Express, LLC - Moss Lake Compressor Station

TABLE 4. EQUIPMENT LIST

Emission Point ID No:	Description	Construction Date	Routes to:	Operating Rate/Volume	Applicable Requirement(s)?
N/A					

23. Emissions Inventory Questionnaire (EIQ) Forms [LAC 33:III.517.D.3; 517.D.6]

Complete one (1) EIQ for:

- Each emission source. If two emission sources have a common stack, the applicant may submit one EIQ sheet for the common emissions point. Note any emissions sources that route to this common point in Table 4 of the application.
- Each emissions CAP that is proposed, including each source that is part of the CAP.
- Each alternate operating scenario that a source may operate under. Some common scenarios are:
    1. Sources that combust multiple fuels
    2. Sources that have startup/shutdown max lb/hr emission rates higher than the max lb/hr for normal operating conditions would need a separate EIQ addressing the startup/shutdown emission rates
- Fugitive emissions releases. One (1) EIQ should be completed for each of the following types of fugitive emissions sources or emissions points:
    1. Equipment leaks.
    2. Non-equipment leaks (i.e., road dust, settling ponds, etc).

For each EIQ:

- Fill in all requested information.
- Speciate all Toxic Air Pollutants and Hazardous Air Pollutants emitted by the source.
- Use appropriate significant figures.
- Consult instructions.

The EIQ is in Microsoft Word Excel. Visit the following website to get to the EIQ form.
http://deq.louisiana.gov/page/air-permit-applications

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT1	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 1	Method 18,"Interpolation - Map" Datum NAD83
Tempo Subject Item ID. No.		UTM Zone 15 Horizontal 459437.80 mE Vertical 3328938.31 mN
New		Latitude 30 ° 5 ' 27 " 42 hundredths
		Longitude -93 ° 25 ' 15 " 43 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) ASCCT1 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate Matter (PM-10)				4.58	5.03	20.06	--	A		
Particulate Matter (PM 2.5)				4.58	5.03	20.06	--	A		
CO2e				*	*	144,568.00	--	A		
Sulfur dioxide				0.17	0.33	0.75	--	A		
Nitrogen oxides				14.61	16.20	63.98	--	A		
Carbon monoxide				21.92	24.10	96.03	--	A		
Total VOC				5.30	5.83	23.22	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT1	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 1	Method: 18,"Interpolation - Map" Datum: NAD83
Tempo Subject Item ID. No.		UTM Zone: 15 Horizontal: 459437.80 mE Vertical: 3328938.31 mN
New		Latitude: 30 ° 5 ' 27 " 42 hundredths
		Longitude: -93 ° 25 ' 15 " 43 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): ASCCT1 Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Acetaldehyde			00075-07-0	0.01	0.01	0.05	--	A		
Acrolein			00107-02-8	0.002	0.002	0.008	--	A		
Benzene			00071-43-2	0.003	0.004	0.01	--	A		
Ethyl benzene			00100-41-4	0.01	0.01	0.04	--	A		
Formaldehyde			00050-00-0	0.20	0.21	0.85	--	A		
Naphthalene (and compounds)			00091-20-3	<0.001	<0.001	<0.01	--	A		
n-hexane			00110-54-3	0.01	0.02	0.04	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT1	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 1	Method: 18,"Interpolation - Map" Datum: NAD83
Tempo Subject Item ID. No.		UTM Zone: 15 Horizontal: 459437.80 mE Vertical: 3328938.31 mN
New		Latitude: 30 ° 5 ' 27 " 42 hundredths
		Longitude: -93 ° 25 ' 15 " 43 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): ASCCT1 Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Polynuclear Aromatic Hydrocarbons			00206-44-0	0.001	0.001	0.003	--	A		
Propylene oxide			00075-56-9	0.01	0.01	0.03	--	A		
Toluene			00108-88-3	0.04	0.04	0.16	--	A		
Xylene (mixed isomers)			01330-20-7	0.02	0.02	0.08	--	A		
Hydrogen Sulfide			07783-06-4	0.002	0.003	0.01	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT2	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 2	Method: 18,"Interpolation - Map" Datum: NAD83
Tempo Subject Item ID. No.: New		UTM Zone: 15 Horizontal: 459471.51 mE Vertical: 3328938.72 mN
		Latitude: 30 ° 5 ' 27 " 42 hundredths
		Longitude: -93 ° 25 ' 14 " 16 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft / N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): ASCCT2 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate Matter (PM-10)				4.58	5.03	20.06	--	A		
Particulate Matter (PM 2.5)				4.58	5.03	20.06	--	A		
CO2e				*	*	144,568.00	--	A		
Sulfur dioxide				0.17	0.33	0.75	--	A		
Nitrogen oxides				14.61	16.20	63.98	--	A		
Carbon monoxide				21.92	24.10	96.03	--	A		
Total VOC				5.30	5.83	23.22	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT2	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 2	Method: 18,"Interpolation - Map" Datum: NAD83
Tempo Subject Item ID. No.: New		UTM Zone: 15 Horizontal: 459471.51 mE Vertical: 3328938.72 mN
		Latitude: 30 ° 5 ' 27 " 42 hundredths
		Longitude: -93 ° 25 ' 14 " 16 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft / N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): ASCCT2 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Acetaldehyde			00075-07-0	0.01	0.01	0.05	--	A		
Acrolein			00107-02-8	0.002	0.002	0.008	--	A		
Benzene			00071-43-2	0.003	0.004	0.01	--	A		
Ethyl benzene			00100-41-4	0.01	0.01	0.04	--	A		
Formaldehyde			00050-00-0	0.20	0.21	0.85	--	A		
Naphthalene (and compounds)			00091-20-3	<0.001	<0.001	<0.01	--	A		
n-hexane			00110-54-3	0.01	0.02	0.04	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT2	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 2	Method: 18,"Interpolation - Map" Datum: NAD83
Tempo Subject Item ID. No.: New		UTM Zone: 15 Horizontal: 459471.51 mE Vertical: 3328938.72 mN
		Latitude: 30 ° 5 ' 27 " 42 hundredths
		Longitude: -93 ° 25 ' 14 " 16 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft / N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): ASCCT2 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Polynuclear Aromatic Hydrocarbons			00206-44-0	0.001	0.001	0.003	--	A		
Propylene oxide			00075-56-9	0.01	0.01	0.03	--	A		
Toluene			00108-88-3	0.04	0.04	0.16	--	A		
Xylene (mixed isomers)			01330-20-7	0.02	0.02	0.08	--	A		
Hydrogen Sulfide			07783-06-4	0.002	0.003	0.01	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT3	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 3	Method: 18,"Interpolation - Map" Datum: NAD83
Tempo Subject Item ID. No.: New		UTM Zone: 15 Horizontal: 459505.25 mE Vertical: 3328939.43 mN
		Latitude: 30 ° 5 ' 27 " 46 hundredths
		Longitude: -93 ° 25 ' 12 " 89 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft / N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): ASCCT3 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate Matter (PM-10)				4.58	5.03	20.06	--	A		
Particulate Matter (PM 2.5)				4.58	5.03	20.06	--	A		
CO2e				*	*	144,568.00	--	A		
Sulfur dioxide				0.17	0.33	0.75	--	A		
Nitrogen oxides				14.61	16.20	63.98	--	A		
Carbon monoxide				21.92	24.10	96.03	--	A		
Total VOC				5.30	5.83	23.22	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT3	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 3	Method 18,"Interpolation - Map" Datum NAD83
Tempo Subject Item ID. No.		UTM Zone 15 Horizontal 459505.25 mE Vertical 3328939.43 mN
New		Latitude 30 ° 5 ' 27 " 46 hundredths
		Longitude -93 ° 25 ' 12 " 89 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) ASCCT3 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Acetaldehyde			00075-07-0	0.01	0.01	0.05	--	A		
Acrolein			00107-02-8	0.002	0.002	0.008	--	A		
Benzene			00071-43-2	0.003	0.004	0.01	--	A		
Ethyl benzene			00100-41-4	0.01	0.01	0.04	--	A		
Formaldehyde			00050-00-0	0.20	0.21	0.85	--	A		
Naphthalene (and compounds)			00091-20-3	<0.001	<0.001	<0.01	--	A		
n-hexane			00110-54-3	0.01	0.02	0.04	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT3	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 3	Method 18,"Interpolation - Map" Datum NAD83
Tempo Subject Item ID. No.		UTM Zone 15 Horizontal 459505.25 mE Vertical 3328939.43 mN
New		Latitude 30 ° 5 ' 27 " 46 hundredths
		Longitude -93 ° 25 ' 12 " 89 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) ASCCT3 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Polynuclear Aromatic Hydrocarbons			00206-44-0	0.001	0.001	0.003	--	A		
Propylene oxide			00075-56-9	0.01	0.01	0.03	--	A		
Toluene			00108-88-3	0.04	0.04	0.16	--	A		
Xylene (mixed isomers)			01330-20-7	0.02	0.02	0.08	--	A		
Hydrogen Sulfide			07783-06-4	0.002	0.003	0.01	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT4	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 4	Method 18,"Interpolation - Map" Datum NAD83
Tempo Subject Item ID. No.		UTM Zone 15 Horizontal 459539.18 mE Vertical 3328939.24 mN
New		Latitude 30 ° 5 ' 27 " 46 hundredths
		Longitude -93 ° 25 ' 11 " 62 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): ASCCT4 Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate Matter (PM-10)				4.58	5.03	20.06	--	A		
Particulate Matter (PM 2.5)				4.58	5.03	20.06	--	A		
CO2e				*	*	144,568.00	--	A		
Sulfur dioxide				0.17	0.33	0.75	--	A		
Nitrogen oxides				14.61	16.20	63.98	--	A		
Carbon monoxide				21.92	24.10	96.03	--	A		
Total VOC				5.30	5.83	23.22	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT4	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 4	Method: 18,"Interpolation - Map" Datum: NAD83
Tempo Subject Item ID. No.: New		UTM Zone: 15 Horizontal: 459539.18 mE Vertical: 3328939.24 mN
		Latitude: 30 ° 5 ' 27 " 46 hundredths
		Longitude: -93 ° 25 ' 11 " 62 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): ASCCT4	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
Pollutant				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Acetaldehyde			00075-07-0	0.01	0.01	0.05	--	A		
Acrolein			00107-02-8	0.002	0.002	0.008	--	A		
Benzene			00071-43-2	0.003	0.004	0.01	--	A		
Ethyl benzene			00100-41-4	0.01	0.01	0.04	--	A		
Formaldehyde			00050-00-0	0.20	0.21	0.85	--	A		
Naphthalene (and compounds)			00091-20-3	<0.001	<0.001	<0.01	--	A		
n-hexane			00110-54-3	0.01	0.02	0.04	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT4	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 4	Method: 18,"Interpolation - Map" Datum: NAD83
Tempo Subject Item ID. No.: New		UTM Zone: 15 Horizontal: 459539.18 mE Vertical: 3328939.24 mN
		Latitude: 30 ° 5 ' 27 " 46 hundredths
		Longitude: -93 ° 25 ' 11 " 62 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft / N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): ASCCT4 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Polynuclear Aromatic Hydrocarbons			00206-44-0	0.001	0.001	0.003	--	A		
Propylene oxide			00075-56-9	0.01	0.01	0.03	--	A		
Toluene			00108-88-3	0.04	0.04	0.16	--	A		
Xylene (mixed isomers)			01330-20-7	0.02	0.02	0.08	--	A		
Hydrogen Sulfide			07783-06-4	0.002	0.003	0.01	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT5	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 5	Method 18."Interpolation - Map" Datum NAD83
Tempo Subject Item ID. No.		UTM Zone 15 Horizontal 459572.87 mE Vertical 3328939.77 mN
New		Latitude 30 ° 5 ' 27 " 46 hundredths
		Longitude -93 ° 25 ' 10 " 39 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): ASCCT5 Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate Matter (PM-10)				4.58	5.03	20.06	--	A		
Particulate Matter (PM 2.5)				4.58	5.03	20.06	--	A		
CO2e				*	*	144,568.00	--	A		
Sulfur dioxide				0.17	0.33	0.75	--	A		
Nitrogen oxides				14.61	16.20	63.98	--	A		
Carbon monoxide				21.92	24.10	96.03	--	A		
Total VOC				5.30	5.83	23.22	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT5	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 5	Method: 18,"Interpolation - Map" Datum: NAD83
Tempo Subject Item ID. No.: New		UTM Zone: 15 Horizontal: 459572.87 mE Vertical: 3328939.77 mN
		Latitude: 30 ° 5 ' 27 " 46 hundredths
		Longitude: -93 ° 25 ' 10 " 39 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft N/A ft²	80 ft	79.25 ft/sec	373473 ft³/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): ASCCT5 Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Acetaldehyde			00075-07-0	0.01	0.01	0.05	--	A		
Acrolein			00107-02-8	0.002	0.002	0.008	--	A		
Benzene			00071-43-2	0.003	0.004	0.01	--	A		
Ethyl benzene			00100-41-4	0.01	0.01	0.04	--	A		
Formaldehyde			00050-00-0	0.20	0.21	0.85	--	A		
Naphthalene (and compounds)			00091-20-3	<0.001	<0.001	<0.01	--	A		
n-hexane			00110-54-3	0.01	0.02	0.04	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
ASCCT5	AERODERIVATIVE SIMPLE CYCLE COMBUSTION TURBINE 5	Method 18,"Interpolation - Map" Datum NAD83
Tempo Subject Item ID. No.		UTM Zone 15 Horizontal 459572.87 mE Vertical 3328939.77 mN
New		Latitude 30 ° 5 ' 27 " 46 hundredths
		Longitude -93 ° 25 ' 10 " 39 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft^2)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft^3/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	10 ft / N/A ft^2	80 ft	79.25 ft/sec	373473 ft^3/min	988.1 °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Natural Gas - Turbine (Avg)	267.2
b	Natural Gas - Turbine (Max)	293.9
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	267.2	MMBtu/hr
Maximum Operating Rate/Throughput	293.9	MMBtu/hr
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) ASCCT5 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Polynuclear Aromatic Hydrocarbons			00206-44-0	0.001	0.001	0.003	--	A		
Propylene oxide			00075-56-9	0.01	0.01	0.03	--	A		
Toluene			00108-88-3	0.04	0.04	0.16	--	A		
Xylene (mixed isomers)			01330-20-7	0.02	0.02	0.08	--	A		
Hydrogen Sulfide			07783-06-4	0.002	0.003	0.01	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
EGEN1	EMERGENCY GENERATOR 1 (DIESEL)	Method 18,"Interpolation - Map" Datum NAD83
Tempo Subject Item ID. No.		UTM Zone 15 Horizontal 459438.29 mE Vertical 3328896.44 mN
New		Latitude 30 ° 5 ' 26 " 05 hundredths
		Longitude -93 ° 25 ' 15 " 39 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	1 ft N/A ft²	13 ft	101.91 ft/sec	4808.52 ft³/min	903 °F	100 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	9.94
b		
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	1000	kW
Maximum Operating Rate/Throughput	1000	kW
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered: TBD — Engine Model Year: TBD

Date Engine Was Built by Manufacturer: TBD

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): EGEN1 Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate Matter (PM-10)				0.44	0.44	0.02	--	A		
Particulate Matter (PM 2.5)				0.44	0.44	0.02	--	A		
CO2e				*	*	81.00	--	A		
Sulfur dioxide				0.001	0.001	<0.01	--	A		
Nitrogen oxides				14.11	14.11	0.71	--	A		
Carbon monoxide				7.72	7.72	0.39	--	A		
Total VOC				14.11	14.11	0.71	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
EGEN2	EMERGENCY GENERATOR 2 (DIESEL)	Method: 18,"Interpolation - Map" Datum: NAD83
Tempo Subject Item ID. No.		UTM Zone: 15 Horizontal: 459471.87 mE Vertical: 3328896.79 mN
New		Latitude: 30 ° 5 ' 26 " 06 hundredths
		Longitude: -93 ° 25 ' 14 " 15 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	1 ft / N/A ft²	13 ft	101.91 ft/sec	4808.52 ft³/min	903 °F	100 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	9.94
b		
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	1000	kW
Maximum Operating Rate/Throughput	1000	kW
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered: TBD — Engine Model Year: TBD

Date Engine Was Built by Manufacturer: TBD

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): EGEN2 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate Matter (PM-10)				0.44	0.44	0.02	--	A		
Particulate Matter (PM 2.5)				0.44	0.44	0.02	--	A		
CO2e				*	*	81.00	--	A		
Sulfur dioxide				0.001	0.001	<0.01	--	A		
Nitrogen oxides				14.11	14.11	0.71	--	A		
Carbon monoxide				7.72	7.72	0.39	--	A		
Total VOC				14.11	14.11	0.71	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
EGEN3	EMERGENCY GENERATOR 3 (DIESEL)	Method 18,"Interpolation - Map" Datum NAD83
Tempo Subject Item ID. No.: New		UTM Zone 15 Horizontal 459505.69 mE Vertical 3328897.07 mN
		Latitude 30 ° 5 ' 26 " 09 hundredths
		Longitude -93 ° 25 ' 12 " 88 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	1 ft N/A ft²	13 ft	101.91 ft/sec	4808.52 ft³/min	903 °F	100 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	9.94
b		
c		

Notes

Operating Parameters (include units)	Parameter	Description
Normal Operating Rate/Throughput	1000	kW
Maximum Operating Rate/Throughput	1000	kW
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered: TBD — Engine Model Year: TBD

Date Engine Was Built by Manufacturer: TBD

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): EGEN3 Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate Matter (PM-10)				0.44	0.44	0.02	--	A		
Particulate Matter (PM 2.5)				0.44	0.44	0.02	--	A		
CO2e				*	*	81.00	--	A		
Sulfur dioxide				0.001	0.001	<0.01	--	A		
Nitrogen oxides				14.11	14.11	0.71	--	A		
Carbon monoxide				7.72	7.72	0.39	--	A		
Total VOC				14.11	14.11	0.71	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
EGEN4	EMERGENCY GENERATOR 4 (DIESEL)	Method 18,"Interpolation - Map" Datum NAD83
Tempo Subject Item ID. No.		UTM Zone 15 Horizontal 459539.37 mE Vertical 3328897.87 mN
New		Latitude 30 ° 5 ' 26 " 10 hundredths
		Longitude -93 ° 25 ' 11 " 61 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	1 ft N/A ft²	13 ft	101.91 ft/sec	4808.52 ft³/min	903 °F	100 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	9.94
b		
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	1000	kW
Maximum Operating Rate/Throughput	1000	kW
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered: TBD — Engine Model Year: TBD

Date Engine Was Built by Manufacturer: TBD

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): EGEN4 Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate Matter (PM-10)				0.44	0.44	0.02	--	A		
Particulate Matter (PM 2.5)				0.44	0.44	0.02	--	A		
CO2e				*	*	81.00	--	A		
Sulfur dioxide				0.001	0.001	<0.01	--	A		
Nitrogen oxides				14.11	14.11	0.71	--	A		
Carbon monoxide				7.72	7.72	0.39	--	A		
Total VOC				14.11	14.11	0.71	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
EGEN5	EMERGENCY GENERATOR 5 (DIESEL)	Method 18."Interpolation - Map" Datum NAD83
Tempo Subject Item ID. No.		UTM Zone 15 Horizontal 459573.03 mE Vertical 3328897.88 mN
New		Latitude 30 ° 5 ' 26 " 10 hundredths
		Longitude -93 ° 25 ' 10 " 34 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	1 ft N/A ft²	13 ft	101.91 ft/sec	4808.52 ft³/min	903 °F	100 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	Diesel	9.94
b		
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	1000	kW
Maximum Operating Rate/Throughput	1000	kW
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered: TBD — Engine Model Year: TBD

Date Engine Was Built by Manufacturer: TBD

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): EGEN5 Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Particulate Matter (PM-10)				0.44	0.44	0.02	--	A		
Particulate Matter (PM 2.5)				0.44	0.44	0.02	--	A		
CO2e				*	*	81.00	--	A		
Sulfur dioxide				0.001	0.001	<0.01	--	A		
Nitrogen oxides				14.11	14.11	0.71	--	A		
Carbon monoxide				7.72	7.72	0.39	--	A		
Total VOC				14.11	14.11	0.71	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
FUG01	FUGITIVE EMISSIONS	Method: 18."Interpolation - Map" Datum: NAD83
Tempo Subject Item ID. No.		UTM Zone: 15 Horizontal: 459564.05 mE Vertical: 3328903.75 mN
New		Latitude: 30 ° 5 ' 26 " 29 hundredths
		Longitude: -93 ° 25 ' 10 " 68 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	N/A ft / N/A ft²	N/A ft	N/A ft/sec	N/A ft³/min	N/A °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	N/A	N/A
b		
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	N/A	N/A
Maximum Operating Rate/Throughput	N/A	N/A
Design Capacity/Volume	N/A	N/A
Shell Height (ft)	N/A	N/A
Tank Diameter (ft)	N/A	N/A

☐ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID): FUG01 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
CO2e				*	*	3,573.00	--	A		
Total VOC				5.64	5.64	24.69	--	A		
Benzene			00071-43-2	0.01	0.01	0.02	--	A		
n-hexane			00110-54-3	0.02	0.02	0.07	--	A		
Toluene			00108-88-3	0.003	0.003	0.01	--	A		
Xylene (mixed isomers)			01330-20-7	0.002	0.002	0.01	--	A		
Hydrogen Sulfide			07783-06-4	<0.001	<0.001	<0.01	--	A		

State of Louisiana
Emission Inventory Questionnaire (EIQ) for Air Pollutants

Date of submittal: March 2022

Emission Point ID No. (Alternate ID)	Descriptive name of the Emissions Source (Alt. Name)	Approximate location of stack or vent (see instructions)
TK01	CONDENSATE STORAGE TANK NO. 1	Method 18,"Interpolation - Map" Datum NAD83
Tempo Subject Item ID. No.		UTM Zone 15 Horizontal 459409.91 mE Vertical 3328951.56 mN
New		Latitude 30 ° 5 ' 27 " 83 hundredths
		Longitude -93 ° 25 ' 16 " 48 hundredths

Stack and Discharge Physical Characteristics Change? (yes or no)	Diameter (ft) or Stack Discharge Area (ft²)	Height of Stack Above Grade (ft)	Stack Gas Exit Velocity	Stack Gas Flow at Conditions, not at Standard (ft³/min)	Stack Gas Exit Temperature (°F)	Normal Operating Time (hours/year)	Date of Construction or Modification	Percent of Annual Throughput Through This Emission Point			
								Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
Yes	N/A ft / N/A ft²	N/A ft	N/A ft/sec	N/A ft³/min	N/A °F	8760 hr/yr	2022 Proposed	25%	25%	25%	25%

Fuel

Type of Fuel Used and Heat Input (see instructions)

	Type of Fuel	Heat Input (MMBTU/hr)
a	N/A	N/A
b		
c		

Notes

Operating Parameters (include units)

	Parameter	Description
Normal Operating Rate/Throughput	8648.30	Gal/Yr
Maximum Operating Rate/Throughput	8648.30	Gal/Yr
Design Capacity/Volume	4512.13	gallons
Shell Height (ft)	12	Feet
Tank Diameter (ft)	18	Feet

☑ Fixed Roof ☐ Floating Roof ☐ External ☐ Internal

Date Engine Ordered _____ Engine Model Year _____

Date Engine Was Built by Manufacturer _____

SI Engines: ☐ Rich Burn ☐ Lean Burn ☐ 2 Stroke ☐ 4 Stroke

Air Pollutant Specific Information

Emission Point ID No. (Alternate ID) TK01 / Pollutant	Control Equipment Code	Control Equipment Efficiency	HAP / TAP CAS Number	Proposed Emission Rates			Permitted Emission Rate (Current)	Add, Change, Delete, or Unchanged	Continuous Compliance Method	Concentration in Gases Exiting at Stack
				Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)	Annual (tons/yr)			
Total VOC				0.12	0.12	0.52	--	A		

24. NSR Applicability Summary [LAC 33:III.504 and LAC 33:III.509] ☐ N/A - Refer to Section 2.2 of this application for the PSD analysis.

This section consists of seven subsections, A-G, and is applicable only to new and existing major stationary sources (as defined in LAC 33:III.504 or in LAC 33:III.509) proposing to permit a physical change or change in the method of operation. It would also apply to existing minor stationary sources proposing a physical change or change in the method of operation where the change would be a major source in and of itself. Add rows to each table as necessary. Provide a written explanation of the information summarized in these tables. Consult instructions.

24.A. Project Summary

		A	B	C	D	E	F
Emission Point ID	**Description**	**New, Modified, Affected, or Unaffected***	**Pre-Project Allowables (TPY)**	**Baseline Actual Emissions (over 24-month period)**	**Projected Actual Emissions (TPY)**	**Post-Project Potential to Emit (TPY)**	**Change**
$PM_{2.5}$	**24-Month Period:** MM/DD/YYYY – MM/DD/YYYY						
						$PM_{2.5}$ Change:	
PM_{10}	**24-Month Period:** MM/DD/YYYY – MM/DD/YYYY						
						PM_{10} Change:	
SO_2	**24-Month Period:** MM/DD/YYYY – MM/DD/YYYY						
						SO_2 Change:	
NO_X	**24-Month Period:** MM/DD/YYYY – MM/DD/YYYY						
						NO_X Change:	

CO	**24-Month Period:** MM/DD/YYYY – MM/DD/YYYY						
						CO Change:	

VOC	**24-Month Period:** MM/DD/YYYY – MM/DD/YYYY						
						VOC Change:	

CO_2e	**24-Month Period:** MM/DD/YYYY – MM/DD/YYYY						
						CO_2e Change:	

* Unaffected emissions units are not required to be listed individually. By choosing not to list unaffected emissions units, the applicant asserts that all emissions units not listed in Table 24.A will not be modified or experience an increase in actual annual emissions as part of the proposed project.

24.B. Creditable Contemporaneous Changes

Contemporaneous Period: MM/DD/YYYY – MM/DD/YYYY	

		A	B	C	D	E	F
Emission Point ID	**Description**	**Date of Modification**	**Pre-Project Allowables (TPY)**	**Baseline Actual Emissions (over 24-month period)**	**24-Month Period**	**Post-Project Potential to Emit (TPY)**	**Change**
$PM_{2.5}$							
						$PM_{2.5}$ Change:	

24.B. Creditable Contemporaneous Changes

PM_{10}							
						PM_{10} Change:	

SO_2							
						SO_2 Change:	

NO_X							
						NO_X Change:	

CO							
						CO Change:	

VOC							
						VOC Change:	

24.B. Creditable Contemporaneous Changes

CO_2e							
						CO_2e Change:	

For each source identified as "New" or "Modified" in Section 24.A, complete the following table for each pollutant that will trigger NSR. If LAER is not required per LAC 33:III.504.D.3, indicate such.

24.C. BACT/LAER Summary - Refer to Section 3 of this application for the BACT analysis.

Emission Point ID	Pollutant	BACT/LAER	Limitation	Averaging Period	Description of Control Technology/Work Practice Standard(s)

24.D. PSD Air Quality Analyses Summary

Refer to Appendix G of this application (Air Quality Dispersion Modeling Report).

		A	B	C	D	E	F	G	H	I
Pollutant	Averaging Period	Preliminary Screening Concentration ($\mu g/m^3$)	Level of Significant Impact ($\mu g/m^3$)	Significant Monitoring Concentration ($\mu g/m^3$)	Background ($\mu g/m^3$)	Maximum Modeled Concentration ($\mu g/m^3$)	Modeled + Background Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	Modeled PSD Increment Consumption ($\mu g/m^3$)	Allowable Class II PSD Increment ($\mu g/m^3$)
$PM_{2.5}$	24-hour		-	-				35		9
	Annual		-	-				12		4
PM_{10}	24-hour		5	10				150		30
	Annual		1	-				-		17
SO_2	1-hour		7.8	-				195		-
	3-hour		25	-				1300		512
	24-hour		5	13				365		91
	Annual		1	-				80		20
NO_X	1-hour		7.5	-				189		-
	Annual		1	14				100		25
CO	1-hour		2000	-				40,000	-	-
	8-hour		500	575				10,000	-	-
Lead	3-month		-	0.1				1.5	-	-

24.E Nonattainment New Source Review Offsets [LAC 33:III.517.D.16, LAC 33:III.504.D.4 & 5] ☒ **N/A**

Complete this section only if the proposed project triggers Nonattainment New Source Review (NNSR).

This project triggers NNSR review for: ☐ **NO_X** ☐ **VOC** ☐ **SO_2**

NO_X:

Is the applicant proposing to use internal offsets? ☐ **Yes** ☐ **No**

If not, identify the source of the offsets. **Company:** _____

Facility/Unit: _____

Permit No.: _____

Is an ERC Bank Application included with this application, or has an application already been submitted to LDEQ?
☐ **Yes** ☐ **No**

If the ERC application has already been submitted, give the date: _____

Identify the emissions units from which the offsets will be obtained (reference specific Emission Point ID numbers).

VOC:

Is the applicant proposing to use internal offsets? ☐ **Yes** ☐ **No**

If not, identify the source of the offsets. **Company:** _____

Facility/Unit: _____

Permit No.: _____

Is an ERC Bank Application included with this application, or has an application already been submitted to LDEQ?
☐ **Yes** ☐ **No**

If the ERC application has already been submitted, give the date: _____

Identify the emissions units from which the offsets will be obtained (reference specific Emission Point ID numbers).

SO_2:

Is the applicant proposing to use internal offsets? ☐ **Yes** ☐ **No**

If not, identify the source of the offsets. **Company:** _____

Facility/Unit: _____

Permit No.: _____

Is an ERC Bank Application included with this application, or has an application already been submitted to LDEQ?
☐ **Yes** ☐ **No**

If the ERC application has already been submitted, give the date: _____

Identify the emissions units from which the offsets will be obtained (reference specific Emission Point ID numbers).

In order to expedite processing, please be sure the ERC Bank Application is completed properly. In the case of NO_X, the document should clearly differentiate between ozone season and non-ozone season actual emissions during the baseline period. Be sure to indicate if a portion of the reductions are no longer surplus (e.g., due to new or revised federal or state regulations, use in a netting analysis, etc.).

24.F. Economic Impact

Answer the following questions.

How many temporary jobs will be added as a result of this project? 175

How many permanent jobs will be added as a result of this project? 10

24.G Notification of Federal Land Manager [LAC 33:III.504.E.1, LAC 33:III.509.P.1]
Complete this section only if the proposed project triggers NNSR or PSD.

a. Is the proposed facility or modification located within 100 kilometers of a Class I Area? ☐ **Yes** ☒ **No**
If Yes, determination of Q/d is not required; skip to the next question. If No, complete the Q/d equation below:

$$Q/d = \frac{PM_{10\,(NEI)} + SO_{2\,(NEI)} + NO_{X\,(NEI)} + H_2SO_{4\,(NEI)}}{\text{Class I km}}$$

where: $PM_{10\,(NEI)}$ = net
$SO_{2\,(NEI)}$ = net
$NO_{X\,(NEI)}$ = net
H_2SO_4 = net
Class I = distance to

$$Q/d = \frac{110.26 + 7.18 + 354.78 + 0}{435} = 1.09$$

Per Federal Land Manager guidance, Q values should reflect annual emissions (in tons per year, based on 24-hour maximum allowable emissions). If Q/d < 10, proceed to Section 25. If Q/d ≥ 10, complete the remainder of this Section.

b. Has the applicant provided a copy of the application to the Federal Land Manager? ☐ **Yes** ☐ **No**

c. Does the application contain modeling that demonstrates no adverse impact on Air Quality Related Values (AQRVs) in the Class I Area? ☐ **Yes** ☐ **No**

d. If Yes, indicate the model used: ☐ **VISCREEN** ☐ **PLUVUE II** ☐ **CALPUFF** ☐ **Other:**[4]

e. Has the Federal Land Manager concurred that the proposed project will not adversely impact any AQRVs?
☐ **Yes** ☐ **No** If Yes, please attach correspondence. -

[1]If the net emissions increase of any pollutant is negative, enter "0."
[2]If the project did not trigger a netting analysis, use the project increase. In this case, the value will be less than the pollutant's significance level.
[3]In kilometers.
[4]Model must be approved by LDEQ and the Federal Land Manager.

25. Environmental Assessment Statement (EAS or "IT" Question Responses)

[La. R.S. 30:2018] ☒ **Yes** ☐ **No**

*** This section is required when applying for new Part 70 operating permits and/or major modifications. Any applications for these permit types that do not include answers to these questions will not be considered to be administratively complete. ***

For new Part 70 operating permits and/or major modifications, answers to these questions must be provided by the applicant to the local governmental authority and the designated public library at no additional costs to these entities. Consult instructions to determine what is considered to be a "local governmental authority" and a "designated public library." Indicate the name and address of the local governmental authority and the designated public library to which the answers to these questions were sent:

Name of Local Governing Authority Calcasieu Parish Policy Jury			**Name of Designated Public Library** Sulphur Regional Library		
Street or P.O. Box 1015 Pithon St.			**Street or P.O. Box** 1160 Cypress St.		
City Lake Charles	**State** LA	**ZIP** 70601	**City** Sulphur	**State** LA	**ZIP** 70663

Answer the following five questions on separate pages using full and complete answers. Include as many pages as necessary in order to provide full and complete answers. This information is required per Louisiana Revised Statutes 30:2018 (La. R.S. 30:2018).

Refer to Section 5 of this application for the Environmental Assessment Statement.

Question 1: **Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?**

Question 2: **Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?**

Question 3: **Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits?**

Question 4: **Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits?**

Question 5: **Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits?**

PART 70 OPERATING PERMIT APPLICATION COMPLETENESS CHECKLIST

Instructions: Complete this checklist and submit with the completed air permit application.

LAC 33:III.	Completeness Questions Relative to the Part 70 Permit Application	Yes	No	NA	Location Within the Permit Application
517.A Timely Submittal	Was a Copy of the Application Also Submitted to EPA?	X			
517.B.1,2 Certification	Does the Application include a Certification by a Responsible Official?	X			AAE Section 10
517.B.3 Certification	Does the Application Include Certification by a Professional Engineer or their Designee:	X			AAE Section 10
517.D.1 Identifying Information	Does the Application Include:				
	1. Company Name, Physical and Mailing Address of Facility?	X			AAE Sections 1, 2, and 11
	2. Map showing Location of the Facility?	X			Appendix A
	3. Owner and Operator Names and Agent?	X			AAE Section 1
	4. Name and Telephone Number of Plant Manager or Contact?	X			AAE Section 11
517.D.2 SIC Codes, Source Categories	Does the Application Include a Description of the Source's Processes and Products?	X			Section 1
	Does the Application Include the Source's SIC Code?	X			AAE Section 5
	Does the Application Include EPA Source Category of HAPs if applicable?			X	
517.D.3,6 EIQ Sheets	Has an EIQ Sheet been Completed for each Emission Point whether an Area or Point Source?	X			AAE Section 23
517.D.4 Monitoring Devices	Does the Application Include Identification and Description of Compliance Monitoring Devices or Activities?	X			AAE Section 22
517.D.5 Revisions and Modifications Only	For Revisions or Modifications, Does the Application include a Description of the Proposed Change and any Resulting Change in Emissions?			X	
517.D.7 General Information	Does the Application Include Information Regarding Fuels, Fuel Use, Raw Materials, Production Rates, and Operating Schedules as necessary to substantiate emission rates?	X			AAE Section 23 and Appendix B
517 D.8 Operating Limitations	Has Information Regarding any Limitations on Source Operation or any Applicable Work Practice Standards been Identified?	X			AAE Section 22 and Section 3
517.D.9 Calculations	Are Emission Calculations Provided?	X			Appendices B and C
517.D.10 Regulatory Review	Does the Application Include a Citation and Description of Applicable Louisiana and Federal Air Quality Requirements and Standards?	X			AAE Section 22 and Section 2

LAC 33:III.	Completeness Questions Relative to the Part 70 Permit Application	Yes	No	NA	Location Within the Permit Application
517.D.11 Test Methods	Has a Description of or a Reference to Applicable Test Methods Used to Determine Compliance with Standards been Provided?	X			AAE Section 22
517.D.12 Major Sources of TAPs	Does the Application include Information Regarding the Compliance History of Sources Owned or Operated by the Applicant (per LAC 33.III.5111)?		X		
517.D.13 Major Sources of TAPs	Does the Application include a Demonstration to show that the Source Meets all Applicable MACT and Ambient Air Standard Requirements?			X	
517.D.14 PSD Sources Only	If Required by DEQ, Does the Application Include Information Regarding the Ambient Air Impact for Criteria Pollutants as Required for the Source Impact Analysis per LAC 33:III.509.K, L, and M?	X			Appendix G
517 D.15 PSD Sources Only	If Required by DEQ, Does the Application Include a Detailed Ambient Air Analysis?	X			Appendix G
517.D.16, 18	Has any Additional Information been Provided?		X		
517.D.17 Fees	Has the Fee Code been Identified?	X			AAE Section 5
	Is the Applicable Fee Included with the Application?	X			Attached to cover letter
517.E.1 Additional Part 70 Requirements	Does the Certification Statement Include a Description of the Compliance Status of Each Emission Point in the Source with All Applicable Requirements?	X			AAE Section 10
517E.2 Additional Part 70 Requirements	Does the Certification Statement Include a Statement that the Source will continue to Comply with All Applicable Requirements with which the Source is in Compliance?	X			AAE Section 10
517.E.3 Additional Part 70 Requirements	Does the Certification Statement Include a Statement that the Source will, on a timely basis, meet All Applicable Requirements that will Become Effective During the Permit Term?	X			AAE Section 10
517.E.4 Additional Part 70 Requirements	Are there Applicable Requirements for which the Source is not in Compliance at the Time of Submittal?		X		
	Does the Application include a Compliance Plan Schedule?			X	
	Does the Schedule Include Milestone Dates for which Significant Actions will occur?			X	
	Does the Schedule Include Submittal Dates for Certified Progress Reports?			X	
517.E.5 Additional Part 70 Requirements Acid Rain	Is this Source Covered by the Federal Acid Rain Program?		X		

LAC 33:III.	Completeness Questions Relative to the Part 70 Permit Application	Yes	No	NA	Location Within the Permit Application
	Are the Requirements of LAC 33.III.517.E 1-4 included in the Acid Rain Portion of the Compliance Plan?			X	
517.E.6 Additional Part 70 Requirements	Have any Exemptions from any Applicable Requirements been Requested?	X			AAE Section 22
	Is the List and explanations Provided?	X			AAE Section 22
517.E.7 Additional Part 70 Requirements	Does the Application Include a Request for a Permit Shield?		X		
	Does the Request List those Federally Applicable Requirements for which the Shield is Requested along with the Corresponding Draft Permit Terms and conditions which are Proposed to Maintain Compliance?			X	
517.E.8 Additional Part 70 Requirements	Does the Application Identify and Reasonably Anticipated Alternative Operating Scenarios?		X		
	Does the Application include Sufficient Information to Develop permit Terms and Conditions for Each Scenario, Including Source Process and Emissions Data?			X	
517.F Confidentiality	Does the Application Include a Request for Non-Disclosure (Confidentiality)?		X		
525.B. Minor Permit Modifications	Does the Application Include a Listing of New Requirements Resulting for the Change?			X	
	Does the Application Include Certification by the Responsible Official that the Proposed Action Fits the Definition of a Minor Modification as per LAC 33:III.525.A.			X	
	Does the Certification also Request that Minor Modification Procedures be Used?			X	
	Does the Application, for Part 70 Sources, Include the Owner's Suggested Draft Permit and Completed Forms for the Permitting Authority to Use to Notify Affected States?			X	
La. R.S. 30:2018 – PSD/NNSR only	Has a copy of the answers to the questions posed in the Environmental Assessment Statement (Section 25) been sent to the local governing authority at no cost to the local governing authority?	X			AAE Section 25 and Section 5
	Has a copy of the answers to the questions posed in the Environmental Assessment Statement (Section 25) been sent to the designated public library at no cost to the designated public library?	X			

5. ENVIRONMENTAL ASSESSMENT STATEMENT (EAS OR "IT" QUESTION RESPONSES)

Venture Global CP2 LNG, LLC (CP2 LNG) and Venture Global CP Express, LLC (CP Express), both wholly owned subsidiaries of Venture Global LNG, Inc. (Venture Global LNG), propose to construct and operate natural gas liquefaction, storage, and export facilities at a proposed liquefied natural gas (LNG) terminal (Terminal Facilities) on the east side of the Calcasieu Ship Channel in Cameron Parish, Louisiana and associated pipeline facilities connecting the Terminal Facilities to the existing natural gas pipeline grid in east Texas and southwest Louisiana. CP Express will construct approximately 85.4 miles of new, 48-inch-diameter natural gas pipeline (the CP Express Pipeline); approximately 6.0 miles of new, 24-inch-diameter lateral pipeline (the Enable Gulf Run Lateral); and associated aboveground facilities in Texas and Louisiana, which will be constructed in two phases (collectively referred to as the Pipeline System).

As part of the Pipeline System, CP Express is proposing to construct and operate a compressor station, the Moss Lake Compressor Station in Calcasieu Parish, Louisiana. The Moss Lake Compressor Station will be constructed in two phases. In Phase 1, CP Express will construct 69,600 horsepower (hp) of compression at the Moss Lake Compressor Station; later in Phase 2, it will construct an additional 117,400 hp of compression. CP Express is submitting this application to the Louisiana Department of Environmental Quality (LDEQ) to request authorization to construct and operate the Moss Lake Compressor Station in accordance with the LDEQ Title V Operating Permits Program and Prevention of Significant Deterioration (PSD) Program. Refer to Section 1.1 of this application for additional information.

It should be noted that the Terminal Facilities and Pipeline System require approval from the Federal Energy Regulatory Commission (FERC) under Sections 3 and 7 of the Natural Gas Act. As such, the Terminal Facilities and Pipeline System are considered to be a major federal action under the National Environmental Policy Act (NEPA),[44] and FERC is required to complete an Environmental Impact Statement (EIS) to evaluate the potential environmental impacts. The FERC EIS process is much like the Environmental Assessment Statement (EAS) process required under state law, Louisiana Revised Statute (La. R.S.) 30:2018. FERC requires that Venture Global LNG submit Resource Reports as part of the EIS process under NEPA. Venture Global LNG will refer to these Resource Reports throughout this EAS and urges the LDEQ to refer to the full Resource Reports and any updates thereto publicly available under FERC Docket Nos. CP22-21-000 and CP22-22-000 through FERC's electronic docket system.[45]

CP Express submits this EAS for the Moss Lake Compressor Station in support of and as part of its application for a Title V operating permit under Part 70 of Title 40 of the Code of Federal Regulations (40 C.F.R Part 70) and for a PSD permit-to-construct under New Source Review (NSR). Pursuant to La. R.S. 30:2018.A, an EAS is required for:[46]

> *...a new permit or a major modification of an existing permit as defined in rules and regulations that would authorize the treatment, storage, or disposal of hazardous wastes, the disposal of solid wastes, or the discharge of water pollutants or air emissions in sufficient quantity or concentration to constitute a major source...*

[44] 42 U.S.C. § 4321 *et seq.*
[45] FERC e-Docket. Available at https://elibrary.ferc.gov/eLibrary/search. Accessed July 2022.
[46] La. R.S. 30:2018.

As stated in La. R.S. 30:2018.B, the purpose of the EAS is to satisfy the public trustee requirements of Article IX, Section 1 of the Louisiana Constitution.[47] Article IX states the following:[48]

> *The natural resources of the state, including air and water, and the healthful, scenic, historic, and esthetic quality of the environment shall be protected, conserved, and replenished insofar as possible and consistent with the health, safety, and welfare of the people. The legislature shall enact laws to implement this policy.*

The EAS must include a detailed evaluation of both air and non-air environmental impacts of the proposed Moss Lake Compressor Station. To satisfy this requirement, Section 25 of the LDEQ Application for Approval of Emissions (AAE) requires applicants for permit actions subject to La. R.S. 30:2018 to address the following five questions in the EAS:

- **Question 1:** Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?
- **Question 2:** Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?
- **Question 3:** Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits?
- **Question 4:** Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits?
- **Question 5:** Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits?

A response to each question above is provided in the forthcoming sections. CP Express selected the Calcasieu Parish site for the compressor station primarily due to hydraulic requirements of the project and the presence of existing infrastructure, including suitable access roads and electric distribution lines, that mitigate the environmental impacts that would otherwise occur by building new infrastructure. Alternative projects and mitigating measures assessed by CP Express will be discussed herein. The Moss Lake Compressor Station will comply with all applicable ambient air, water and noise standards that are designed to ensure there is no adverse human health or environmental impact. No environmental justice communities will be adversely impacted by the Moss Lake Compressor Station. The proposed Moss Lake Compressor Station will sustain positive economic and social benefits, while avoiding or minimizing potential adverse environmental impacts.

5.1 Question 1

Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?

Response:

Yes. CP Express has designed the Moss Lake Compressor Station to avoid the potential and real adverse environmental effects to the maximum extent possible. The Moss Lake Compressor Station will comply with all applicable ambient environmental standards and will employ best available technology to control air emissions and water effluents. To avoid or minimize potential adverse environmental impacts, numerous

[47] *Ibid.*
[48] Louisiana Constitution, Article IX, Sec. 1. Natural Resources.

measures were implemented in the facility's design. One example is the use of pipeline quality natural gas as the primary fuel for all gas turbine-driven compressors as well as each gas turbine-driven compressor being equipped with Dry Low NO_X technology for control of nitrogen oxide (NO_X) emissions. As detailed in the subsequent sections, CP Express is committed to minimizing the potential impact of its operations upon the environment and using best available control technologies and best management practices (BMPs) to reduce or prevent potential adverse environmental impacts when feasible.

The Moss Lake Compressor Station will be permitted to emit greenhouse gases (GHGs). CP Express understands such emissions are of concern and acknowledges the efforts of the Governor's Task Force on Climate Change to reduce GHG emissions in Louisiana by 40 percent to 50 percent by 2030 and to reach net zero by 2050.[49] Although the Moss Lake Compressor Station will represent an increase in GHG emissions, the net impact of its operations (i.e., transport of domestically produced natural gas to the Terminal Facilities for subsequent export) will result in a reduction of global GHG emissions by providing clean, affordable energy to overseas markets.

The Moss Lake Compressor Station will meet or exceed all applicable environmental regulations in a manner that minimizes the potential for adverse environmental effects. The following sub-sections further describe the key potential impacts to the environment and planned mitigation efforts, including a discussion of specific GHG mitigation measures in Section 5.1.1.3.

5.1.1 Air

The primary sources of air emissions at the Moss Lake Compressor Station will be natural-gas fired turbines and diesel-fired emergency generators. Other sources include storage vessels and fugitive emissions from components such as flanges, pumps, and valves. There will also be minor emissions from several insignificant activities and General Condition XVII activities, such as truck loading activities, miscellaneous venting from filter separators, and pipeline pigging. The facility-wide potential to emit (PTE) from the Moss Lake Compressor Station for certain criteria pollutants is greater than the Title V major source threshold of 100 tons per year (tpy). The facility's PTE for NOx and carbon monoxide (CO) exceeds the PSD major source threshold and the PTE for the following pollutants will exceed the PSD major modification thresholds: particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), volatile organic compounds (VOC), and GHGs. As a result, the Moss Lake Compressor Station will be classified as a major source under both Title V and PSD regulations. The facility will be classified as a minor source (area source) of federal hazardous air pollutants (HAPs) and Louisiana toxic air pollutants (TAPs), as its facility-wide PTE will be less than the major source thresholds of 10 tpy (individual HAP/TAP) and 25 tpy (aggregate HAPs/TAPs).

5.1.1.1 The Proposed Emissions from the Moss Lake Compressor Station Will Not Exceed Applicable Federal and State Ambient Air Standards

The proposed emissions from the Moss Lake Compressor Station are subject to the federal Clean Air Act (CAA) requirements as well as Louisiana Air Pollution Control Standards. The CAA requires the U.S. Environmental Protection Agency (U.S. EPA) to establish National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. Specifically, the NAAQS are established by the U.S. EPA to ensure that the air quality outside the boundary of a facility (i.e., ambient air)

[49] Office of the Governor, "Gov. Edwards Signs Executive Orders to Address Climate Change and Enhance Coastal Resilience", August 19, 2020. Available at: https://gov.louisiana.gov/index.cfm/newsroom/detail/2647. Accessed July 2022.

is protective of public health and welfare, with a margin of safety. The CAA establishes two types of NAAQS:[50]

- *Primary standards* provide public health protection with an adequate margin of safety, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly; and
- *Secondary standards* provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

The U.S. EPA established primary and secondary NAAQS for the following six principal pollutants (i.e., "criteria" air pollutants): CO, lead, NO_2, ozone (evaluated using ozone precursors NO_X and VOCs), particle pollution (PM_{10} and $PM_{2.5}$), and SO_2.[51] If ambient monitoring data for a geographic area show concentrations of a criteria pollutant equal to or below a NAAQS, the U.S. EPA designates the area as "*attainment/unclassifiable*" for that particular NAAQS. If ambient monitoring data show concentrations of a criteria pollutant above a NAAQS, the U.S. EPA designates the area as "*nonattainment*" for that particular NAAQS. In some cases, the U.S. EPA is not able to determine an area's status after evaluating the available information. Those areas are designated as "*unclassifiable*".[52]

Louisiana has adopted each of the federal NAAQS as enforceable state regulations.[53] Pursuant to approved U.S. EPA protocols, the LDEQ operates several ambient air monitoring stations which measure criteria pollutants throughout the Lake Charles Metropolitan Statistical Area (MSA) in the LDEQ Southwest region, which includes Calcasieu Parish.[54] These air monitoring stations measure the ambient concentrations of criteria pollutants and often also measure meteorological parameters such as outdoor temperature, wind velocity, and wind direction.[55] Calcasieu Parish is currently designated attainment or unclassifiable for each NAAQS,[56,57] which means the existing air quality within the parish meets all federal criteria pollutant NAAQS that are protective of human health and the environment.

To obtain the Title V and PSD Permits for the Moss Lake Compressor Station, CP Express is required to conduct an air quality dispersion modeling analysis for certain PSD-regulated criteria pollutants. The modeling analysis has three objectives: 1) demonstrate that the proposed emissions will not cause or significantly contribute to any exceedance of a NAAQS; 2) demonstrate that the air quality in the area will not be significantly deteriorated by showing that the proposed emissions are within allowable "growth increments"; and 3) demonstrate that there will be no additional adverse environmental impacts, including no visibility impacts at any Class I air quality area.

Modeling was performed to determine the potential worst-case ambient air quality impacts at and beyond the property boundaries of the Moss Lake Compressor Station. Modeled impacts less than the Significant Impacts Level (SIL), which is only a fraction of the NAAQS, are considered to be insignificant and no further

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[50] 42 U.S.C. § 7409(b)(1) and (2) (Clean Air Act, § 109(b)(1) and (2).
[51] U.S. EPA, NAAQS Table. Available at: https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed July 2022.
[52] U.S. EPA, NAAQS Designations Process. Available at: https://www.epa.gov/criteria-air-pollutants/naaqs-designations-process. Accessed July 2022.
[53] LAC 33:III.Ch. 7.
[54] LDEQ, Southwest Ambient Air Monitoring Stations. Available at: https://deq.louisiana.gov/page/southwest. Accessed July 2022.
[55] LDEQ, Louisiana Ambient Air Monitoring Sites. Available at: https://www.deq.louisiana.gov/assets/docs/Air/LouisianaAmbientAirMonitoringSites.pdf. Accessed July 2022.
[56] 40 C.F.R. Part 81 – Designation of Areas for Air Quality Planning Purposes, Subpart C – Section 107 Attainment Status Designations – Louisiana (40 C.F.R. Section 81.319).
[57] U.S. EPA, Current Nonattainment Counties for All Criteria Pollutants. Available at: https://www3.epa.gov/airquality/greenbook/ancl.html. Accessed July 2022.

modeling is required. Any modeled impacts of a specific PSD pollutant greater than the prescribed SIL, however, triggers a full impact analysis for that pollutant which considers not only the proposed emissions from the Moss Lake Compressor Station, but also emissions from existing sources within the potential impact area, in order to demonstrate that the proposed Moss Lake Compressor Station will not cause or contribute to a violation of any NAAQS or prescribed PSD increment standard.[58]

PSD growth increments are established to allow some growth in attainment areas, but not so much as would cause the air quality in clean areas to deteriorate to the level set by the NAAQS. The NAAQS is a maximum allowable concentration ceiling. A PSD increment, however, is the maximum allowable increase in concentration that is allowed to occur above a baseline concentration for a pollutant.

Finally, the additional impacts analysis required under the PSD permitting program assesses the potential impacts of air, ground, and water pollution on soils, vegetation, and visibility that may be caused by the increase in emissions of the NSR regulated pollutants subject to PSD review and from associated growth resulting from the proposed Moss Lake Compressor Station.[59] Associated growth is industrial, commercial, and residential growth that may occur in the area as a result of the proposed Moss Lake Compressor Station. The PSD additional impacts analysis is similar to the Louisiana-required EAS in that it considers multi-media environmental impacts.

The air quality dispersion modeling analysis for the Moss Lake Compressor Station (see Appendix G to this application) demonstrates that the proposed emissions will not cause or contribute to a violation of any NAAQS or PSD increment standards. Additionally, the air quality modeling analysis includes a secondary $PM_{2.5}$ and ozone impacts analysis. In accordance with U.S. EPA guidance, CP Express utilized the Tier 1 Modeled Emission Rates for Precursors (MERPs) method[60] to demonstrate that the proposed emissions will not cause or contribute to a violation of the 8-hour ozone NAAQS or the 24-hour or annual $PM_{2.5}$ NAAQS/PSD increments. The additional impacts analysis demonstrates that the proposed emissions have negligible growth-related ambient air impacts, are in compliance with the secondary NAAQS and visibility impacts, and do not have any adverse impact on the Breton National Wildlife Refuge Class I Area's Air Quality Related Values (AQRV) or Class I increments. The Breton National Wildlife Refuge is approximately 435 kilometers (km) from the Moss Lake Compressor Station and outside the 100-km threshold of concern established by the U.S. EPA, the Federal Land Manager (FLM), Louisiana Department of Natural Resources (LDNR), and LDEQ.

Compliance with the NAAQS, PSD Increments, and lack of additional adverse impacts demonstrates that there will not be significant adverse impacts to air from the Moss Lake Compressor Station. As noted above, the U.S. EPA must establish the primary NAAQS at levels that provide an adequate margin of safety to protect the public health. This is reflected in Section 109 of the CAA as stated below:[61]

> *National primary ambient air quality standards, prescribed under subsection (a) of this section shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health. Such primary standards may be revised in the same manner as promulgated.*

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[58] LAC 33:III.509.K, L, and M.
[59] LAC 33:III.509.O.
[60] See https://www.epa.gov/nsr/guidance-development-modeled-emission-rates-precursors-merps-tier-1-demonstration-tool-ozone. Accessed July 2022.
[61] Clean Air Act Section 109(b)(1), 42 U.S.C. § 7409(b)(1). Available at: https://www.govinfo.gov/content/pkg/USCODE-2013-title42/html/USCODE-2013-title42-chap85-subchapI-partA-sec7409.htm. Accessed July 2022.

Litigation over past NAAQS determined that economic cost and technical feasibility cannot be considered in setting these primary standards.[62] Therefore, by definition, modeling compliance with the NAAQS demonstrates that no adverse impacts to human health will result from emission of these pollutants as the standards have been set conservatively to protect even sensitive individuals with an adequate margin of safety, and without regard to the cost of compliance.

In Louisiana, facilities emitting certain state-regulated TAPs are also subject to both ambient air standards and technological control requirements. The Louisiana regulations in LAC 33:III.Chapter 51 regulate over 100 TAPs, most of which are also HAPs under Section 112 of the federal CAA (refer to Section 2.4 of this application).[63] Louisiana requires that Class I and II TAPs be controlled using Maximum Available Control Technology (MACT). In addition, the LDEQ has established Louisiana Ambient Air Quality Standards (LAAS) for all Class I, II, and III TAPs per La. R.S. 30:2060.[64] Pursuant to this statutory requirement, the LDEQ established either an 8-hour average LAAS for TAPs that could cause acute effects or annual average LAAS for TAPs that may have chronic effects (over an individual's lifetime). The LAAS apply at the property boundary and are set at levels which would be safe even for a person who might live 24 hours per day for 70 years at the fence line. Thus, in establishing these ambient air standards, the LDEQ has established levels that are safe for residential exposures.

The Moss Lake Compressor Station will be classified as a minor (area) source of Louisiana TAPs, as its facility-wide PTE will be less than the major source thresholds of 10 tpy (individual TAP) and 25 tpy (aggregate TAPs). Thus, per LAC 33:III.5101.A, the Moss Lake Compressor Station will be permitted to emit TAPs at levels that are low enough as to not be subject to the aforementioned ambient air standards and technological control requirements of LAC 33:III.Chapter 51.

5.1.1.2 Proposed Criteria Pollutant Emissions from the Moss Lake Compressor Station Meet or Exceed Applicable Control Technology Requirements

In addition to meeting ambient air quality standards, the PSD program requires that each emission unit subject to PSD must control emissions of the PSD pollutant through application of Best Available Control Technology (BACT).[65] BACT is defined as a stringent emission limitation based on the maximum degree of emissions control that can be achieved for the source that considers energy, environmental, and economic impacts. BACT may be a design, modification, add-on control equipment, work practice, or operational standard. The BACT cannot be less stringent than any applicable New Source Performance Standards (NSPS) in 40 C.F.R. Part 60 or National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 C.F.R. Part 61 or Part 63. The Part 63 NESHAP standards require application of MACT, and for new sources, that means the technology achieved by the best performing source in the category.[66] Refer to Section 3 of this application for a detailed report of selected BACT for each proposed emission unit and PSD subject pollutant at the Moss Lake Compressor Station. Note that the proposed BACT emission limits for NO_X emissions from the aero-derivative simple cycle combustion turbines are more stringent than the respective NSPS KKKK requirements.

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[62] *American Petroleum Institute v. Douglas M. Costle, Administrator, and U.S. EPA,* 665 F.2d 1176 (D.C. Cir. 1981), Available at: https://law.justia.com/cases/federal/appellate-courts/F2/665/1176/408302/ *and Lead Indus. Ass'n, Inc. v. U.S. EPA,* 647 F.2d 1130 (D.C. Cir. 1980), Available at: https://law.justia.com/cases/federal/appellate-courts/F2/647/1130/237769/. Accessed July 2022.

[63] As noted at pg. 17 of 195 in "*Louisiana Guidance for Air Permitting Actions*" (January 2013), Louisiana's TAP list includes all federally-regulated HAPs plus fourteen additional compounds and compound types.

[64] La. R.S. 30:2060. Available at: https://legis.la.gov/Legis/Law.aspx?d=87125. Accessed July 2022.

[65] LAC 33:III.509.J.

[66] Clean Air Act Section 112(d)(3), 42 U.S.C. §7412(d)(3).

As required by the PSD program, CP Express will comply with the stringent NSPS promulgated by the U.S. EPA pursuant to authority under the CAA. The NSPS are technology-based standards that apply to specific categories of stationary sources and set forth restrictions on the quantities or concentration of air pollutants that a source may emit. NSPS are mandated by 42 U.S.C. § 7411(a)(1), which states the following:[67]

> *The term "standard of performance" means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.*

Therefore, NSPS requirements impose an additional layer of protection of the environment as emission units must meet these technology-based emissions limitations regardless of whether the area is in attainment of the NAAQS. The U.S. EPA reviews these NSPS every five years to make sure the regulations are based on the most up-to-date technology. Because BACT under the PSD program must not be less stringent than any applicable NSPS, these very stringent NSPS are evaluated as part of the BACT analysis in Section 3 of this application. The following NSPS apply to emission units at the Moss Lake Compressor Station:

- 40 C.F.R. Part 60 Subpart A – General Provisions include broader definitions of applicability and various methods for maintaining compliance with requirements listed in subsequent subparts of 40 C.F.R. Part 60: the natural gas turbines and the emergency generators will comply with this NSPS;
- 40 C.F.R. Part 60 Subpart KKKK – Standards of Performance for Stationary Combustion Turbines establishes standards for NO_X and SO_2: the natural gas-fired turbines will comply with this NSPS;
- 40 C.F.R. Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines establishes standards for non-methane hydrocarbons (NMHC), NO_X, CO, and PM: the emergency generators will comply with this NSPS; and
- 40 C.F.R. Part 60 Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015 establishes standards for VOC and SO_2. CP Express will comply with applicable fugitive monitoring requirements of 40 C.F.R. Part 60 Subpart OOOOa at the Moss Lake Compressor Station (except for fugitives, none of the proposed emission sources at the Moss Lake Compressor Station will be subject to 40 C.F.R. Part 60 Subpart OOOOa due to meeting non-applicability or exemption criteria as stated in Section 22 of the LDEQ AAE). Depending on the final rule of the recently proposed 40 C.F.R. Part 60 Subpart OOOOb, the equipment at the Moss Lake Compressor Station may be subject to the new rule instead. Accordingly, once promulgated and if applicable, CP Express will comply with 40 C.F.R. Part 60 Subpart OOOOb.

As discussed above, the Moss Lake Compressor Station is an area source of HAPs. Therefore, only the following NESHAP apply to the emergency generators at the Moss Lake Compressor Station:

- 40 C.F.R. Part 63 Subpart A – General Provisions include broader definitions of applicability and various methods for maintaining compliance with requirements listed in subsequent subparts of 40 C.F.R. Part 63: the emergency generators will comply with this NESHAP; and
- 40 C.F.R. Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines establishes standards to minimize HAP emissions through

[67] Clean Air Act Section 111(a)(1), 42 U.S.C. § 7411(a)(1).

control of formaldehyde and/or CO as surrogates: the emergency generators will comply with this NESHAP.

In addition to the federal NSPS and NESHAP requirements outlined above,[68] the Moss Lake Compressor Station is subject to applicable Louisiana regulations, including, but not limited to the following:

- LAC 33:III.Chapter 9 – General Regulations on Control of Emissions and Emission Standards;
- LAC 33:III.Chapter 11 – Control of Emissions of Smoke;
- LAC 33:III.Chapter 13 – Emission Standards for Particulate Matter;
- LAC 33:III.Chapter 21 – Control of Emission of Organic Compounds; and

These Louisiana regulations are aimed at appropriately controlling air emissions from certain sources or operations or from the Moss Lake Compressor Station as a whole. The majority of these rules are also federally enforceable by the U.S. EPA and citizens under the CAA because they are federally approved under the Louisiana State Implementation Plan (SIP).[69] The Louisiana PSD rules specify that BACT cannot be less stringent than any applicable SIP requirement.

As stated above, Section 3 of this application contains a detailed BACT analysis for each regulated pollutant that is subject to PSD review for the Moss Lake Compressor Station. It is important to note that BACT is a "top down" analysis determined on a case-by-case basis, with consideration given to the technical and economic feasibility of reducing or eliminating emissions (i.e., potential technologies are analyzed and ranked in descending order of stringency). A technology cannot be eliminated from the top of the list if it is technologically and economically feasible. Because of this "top-down" BACT process and because BACT cannot be less stringent than applicable NESHAP, NSPS, and SIP standards as discussed above (with detailed requirements listed in Section 22 of the LDEQ AAE), potential and real adverse environmental effects are avoided to the maximum extent possible. In short, where the top-down method yields a standard more stringent than an applicable NESHAP, NSPS, or SIP standard, it must be selected. Such is the case for the natural gas-fired turbines where the proposed NO_X BACT is more stringent than the applicable NO_X emission standards of NSPS Subpart KKKK.

5.1.1.3 Greenhouse Gas Emissions

The U.S. EPA has characterized GHGs as pollutants in the context of climate change. Proportionate local and direct impacts are not a result of GHG emissions. Rather, the global climate system is affected by the collective concentration of GHGs in the Earth's atmosphere. Thus, the geographic scope for GHG emissions analysis is global – not local or regional. As an example, the contribution to climate change would be similar for a project 5 miles away emitting 1 ton of GHGs and a project 5,000 miles away emitting 1 ton of GHGs.

The potential GHG emissions from the operation of the Moss Lake Compressor Station are approximately 726,818 tons per year (tpy) from the stationary sources, which is equivalent to 659,358 metric tpy of CO_2e emissions. Operational emissions estimates use a potential to emit basis, assuming the facility would operate at maximum capacity year-round (365 days/year, 24 hours/day). GHG emissions will be minimized by application of EPA-approved BACT under the PSD permitting process. As noted above, this is a top-down

[68] The LDEQ has adopted the majority of NSPS and NESHAP standards by reference. See LAC 33:III.Ch. 30, Subchapter A (NSPS); LAC 33:III.Ch. 51, Subchapter B (Part 61 NESHAP); LAC 33:III.Ch. 51, Subchapter C (Part 63 NESHAPs for Major Sources); and LAC 33:III.Ch. 53, Subchapter B (Part 63 NESHAPs for Area Sources).

[69] U.S. EPA, Louisiana EPA–Approved State Air Quality Implementation Plan (SIP). Available at: https://www.epa.gov/sips-la. Accessed July 2022.

process that requires that the facility use the BACT that is technically feasible and that is economically achievable without causing other adverse energy or environmental impacts. Thus, the PSD process by definition requires control technology and measures that have been found to be the most technologically and economically feasible for reduction of GHG emissions. For example, the proposed BACT for combustion sources involves good design (including insulation), use of low carbon fuel, and use of good combustion practices.

As discussed in Section 3 of this application, the CCS control technology is either technically infeasible or cost prohibitive or both. Because CCS control technology for CO_2 capture is not demonstrated (i.e., the CCS control technology has not been installed and operated successfully on the type of source under review and has only been implemented on a pilot scale basis), the CCS control technology for CO_2 capture is not feasible for the natural gas-fired turbines. Additionally, implementing the CCS control technology at the Moss Lake Compressor Station is cost prohibitive. The overall total annualized cost for implementing the CCS control technology is $181.0/ton of CO_2 removed from the natural gas-fired turbines; therefore, implementing this control technology is cost prohibitive.

The construction and operation of the Moss Lake Compressor Station likely would increase the atmospheric concentration of GHGs and, in combination with past and future emissions from all other sources globally, would contribute incrementally to climate change. To date, neither LDEQ nor FERC have identified a methodology to attribute discrete, quantifiable, physical effects on the environment to a Project's incremental contribution to GHGs. Additionally, the agencies have not identified any established threshold for determining the significance of a Project's GHG emissions.

In order to provide context to consider a Project's emissions, FERC generally compares the Project's construction and operational GHG emissions to the total GHG emissions of the United States as a whole. On a national level for 2019, 5,769.1 million metric tons of CO_2e were emitted (inclusive of CO_2e sources and sinks).[70] Based on the 2019 national levels, the Project's operational emissions could potentially increase United States CO_2e emissions by about 0.01 percent.

In order to provide further context regarding a Project's emissions, FERC sometimes compares the Project's GHG emissions to the relevant state's GHG inventories. As noted above, on a state level for 2018, energy-related CO_2e emissions in Louisiana were 211 million metric tons.[71] Based on the 2018 Louisiana levels, the Project's operational emissions could potentially increase CO_2e emissions by 0.31 percent.

The operation of the Moss Lake Compressor Station likely would increase the atmospheric concentration of GHGs and, in combination with past and future emissions from all other sources globally, would contribute incrementally to climate change. However, the Moss Lake Compressor Station will play a significant role in supporting natural gas transmission to the Terminal Facilities which will produce and export LNG. Export of LNG will encourage the use of more environmentally friendly natural gas for the generation of electricity as distinguished from the use of coal, diesel, or heavy fuel oil used in foreign countries for power generation.[72] Thus, the Moss Lake Compressor Station is likely to contribute to the overall reduction in global GHG emissions.

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[70] U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019* at ES-9 (Table ES-2) (2021). Available at: https://www.epa.gov/sites/default/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf. Accessed July 2022.

[71] U.S. Energy Information Administration, *Table 1, State Energy-Related Carbon Dioxide Emissions by Year, Unadjusted.: Louisiana* (March 2, 2021). Available at: https://www.eia.gov/environment/emissions/state/. Aaccessed July 2022.

[72] See "Update to the Life-Cycle Analysis of GHG Emissions for US LNG Exports," ICF 2020, available at https://www.api.org/-/media/Files/Policy/LNG-Exports/2020/API-ICF-LNG-LCA-Study.pdf. Accessed July 2020.

5.1.1.4 Conclusions - Air

Based on the applicable analysis and regulatory requirements summarized above and more fully in the referenced sections of this application, CP Express has demonstrated that the potential adverse impacts related to air emissions have been avoided to the maximum extent possible.

5.1.2 Water Resources and Hydrology

5.1.2.1 Surface Waters

The Moss Lake Compressor Station will be constructed in the Calcasieu-Mermentau Basin (Hydrologic Unit Code (HUC) 080802).[73] Compressor stations have little process water discharges and minimal impact on stormwater. It is anticipated that the Moss Lake Compressor Station will be classified as a minor source under LDEQ's water permit program. Effluent and stormwater discharges from the station will not pose any adverse impact to water quality in that basin.

Below are more details for the Calcasieu-Mermentau Basin:

- Calcasieu-Mermentau Basin: The Calcasieu-Mermentau Basin is located in southwestern Louisiana and covers about 8,017 square miles. It is bounded by the Red River Basin to the north, the Sabine River Basin to the west, the Atchafalaya-Teche-Vermilion Basin to the east, and the Gulf of Mexico to the south. The basin consists primarily of flat to gently rolling terraces. The southern portion of the basin is located within the Gulf of Mexico coastal zone. Major tributaries within the basin include the Calcasieu River, Ten Mile Creek, Six Mile Creek, Bundicks Creek, the Mermentau River, the Gulf Intracoastal Waterway, Calcasieu Lake, Grand Lake, and White Lake.[74]

The chemical, physical, biological, and aesthetic integrity of the water resources and aquatic environment of Louisiana are protected by the LDEQ. Water quality classifications for waters of the state are based on the designated uses for that waterbody. A waterbody that does not achieve water quality criteria for one or more of its designated uses is considered impaired. The LDEQ defines the following eight uses for surface waters: agricultural (AGR), drinking water supply (DWS), fish and wildlife propagation (FWP), FWP subcategory of limited fish and wildlife use (LAL), outstanding natural resource (ONR), oyster propagation (OYS), primary contact recreation (PCR), and secondary contact recreation (SCR).[75]

The Moss Lake Compressor Station will discharge to the 031001 segment of Bayou Choupique which has the following designated uses: primary contact recreation, secondary contact recreation, and fish and wildlife propagation.[76] Louisiana has developed ambient water quality criteria, both narrative and numeric, that are established to protect these waterbody uses.[77]

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[73] See Section 2.2.1.1 of the Offce of Coastal Management Calcasieu Parish Coastal Zone Management Plan, available at: http://www.dnr.louisiana.gov/assets/OCM/Interagency/LCP/FINALUpdatedCalcasieuParishCZMPlan030617.pdf. Accessed July 2022.

[74] Calcasieu-Mermentau Basin Characterization Report, Louisiana State Reservoir Priority and Development Program, 2009. Available at: http://www.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Public_Works/Dam_Safety/RPDP_Reports/Calcasieu%20Basin%20Report%20FINAL%204.pdf. Accessed July 2022.

[75] LAC 33:IX.1111.

[76] LAC 33:IX.1123, Table 3, for Segment 031001, Bayou Choupique - From headwaters to ICWW (Estuarine).

[77] LAC 33:IX.1113 and 1123.

According to the 2022 Louisiana Water Quality Inventory: Integrated Report for Clean Water Act (CWA) Sections 305(b) and 303(d), Appendix A,[78] this segment is not meeting the following designated uses due to the indicated causes:

- Fish and Wildlife Propagation (dissolved oxygen from natural sources and from septic and similar small on-site treatment systems); and
- Primary Contact Recreation (enterococcus bacteria from natural sources and from septic and similar small on-site treatment systems).

The Moss Lake Compressor Station discharges will comply with all ambient water quality criteria for segment 031001 that are protective of the designated uses, as applicable. Sanitary waste water will be treated by an onsite septic system.

Any applicable LPDES permit will require employment of best available technology to control any priority pollutants and best conventional control technology for conventional pollutants (such as TSS, oil and grease, and pH). As part of the permitting process, LDEQ will use conservative screening methods to determine whether any limits more stringent than those technology-based limits are needed in order to ensure discharges meet ambient water quality standards, as applicable. Any issued LPDES permit will require the monitoring of discharges and submittal of periodic Discharge Monitoring Reports, to evaluate compliance with the permit.

While CWA Section 402(l)(2) exempts the discharge of stormwater from oil and gas transmission facilities from permitting, measures are required to prevent contamination of stormwater.

Specifically for hydrostatic testing activities, CP Express will comply with LPDES General Permit LAG670000 (HST-G) for Discharge of Hydrostatic Test Wastewaters.[79] CP Express will appropriate water for hydrostatic testing of the pipeline and aboveground facilities from surface water and/or municipal sources.

Both 40 C.F.R. 112 and LAC 33:IX.Ch. 9 require that the facility have a Spill Prevention, Control and Countermeasures (SPCC) plan and a Spill Prevention and Control (SPC) plan, respectively, hereinafter collectively referred to as SPCC Plan (the plans may be combined into one plan). The regulations applicable to SPCC Plans require that the facility predict "the direction, rate of flow and total quantity of applicable substances which could be spilled at the facility where experience indicates a reasonable potential for equipment failure and/or human error," and then design diversionary structures or implement BMPs to prevent any such spills from reaching waters of the state.[80] CP Express will adhere to comprehensive contingency plans, operating procedures, and BMPs to prevent and control the discharge of pollutants resulting from accidental release or spill events. If a spill were to occur, implementation of the measures in the SPCC Plan would result in prevention or mitigation of impact on surface water resources.

For water discharges from construction activities other than stormwater, the Moss Lake Compressor Station will comply with LPDES General Permit LAG110000 for Discharges from Cement, Concrete and Asphalt Facilities; LAG300000 for Discharges associated with Dewatering of Petroleum Storage Tanks, Tank Beds, New Tanks and Excavations; LAG420000 for Short-Term and Emergency Discharges; LAG670000 for

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[78] LDEQ, 2022 Water Quality Inventory: Integrated Report. Available at: https://www.deq.louisiana.gov/page/2022-water-quality-inventory-integrated-report-305b303d. Accessed July 2022.
[79] *Ibid.*
[80] LAC 33:IX.907.

Discharges of Hydrostatic Test Wastewater; and/or LAG750000 for Discharges of Exterior Vehicle Washwater as necessary.[81]

For commissioning activities, CP Express will comply with LPDES General Permit LAG670000HST-G for Discharges of Hydrostatic Test Wastewaters.[82] CP Express anticipates it will pump water for hydrostatic testing of the pipeline, and potentially for other equipment, from a municipal source.

Segment 031001 of Bayou Choupique does not have the designated use as a public water supply and there are no LDEQ designated surface water protection areas within the proposed Moss Lake Compressor Station site.

5.1.2.2 Wetlands

CP Express is required to comply with both the federal CWA Section 404 regulations administered by the U.S. Army Corps of Engineers (USACE) and the Louisiana Coastal Use Permit program administered by the Louisiana Department of Natural Resources (LDNR) under the State and Local Coastal Resources Management Act, as amended (La. R.S. 49:214.21 et seq.).

The USACE regulations define wetlands as areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and bottomlands.

CP Express completed wetland field delineations per the USACE (1987) Wetland Delineation Manual and its Atlantic and Gulf Coast Plain Regional Supplement - Version 2.0 (2010) and documented the presence of wetlands within the 60-acre Moss Lake Compressor Station property boundary and one roadside ditch crossed by the proposed driveway access. Development of the 37.3-acre compressor station will result in permanent impacts to 35.2 acres of palustrine scrub-shrub (PSS) wetlands and 0.1 acre of palustrine emergent (PEM) wetlands. CP Express will mitigate unavoidable impacts on wetlands through the USACE and LDNR permitting processes, including appropriate compensatory mitigation for the permanent loss of wetlands. As part of the Joint Permit Application process, CP Express will submit a Compensatory Mitigation Plan. CP Express will coordinate with USACE and LDNR to determine the appropriate mitigation option. Additionally, CP Express will develop and implement protective measures in its Project-specific Plan and Procedures as well as other spill prevention measures to prevent or minimize the effects on adjacent wetlands.

5.1.2.3 Groundwater/Geology/Soils

Construction and operation of the Moss Lake Compressor Station will not have any adverse impact on groundwater, geology, or soils. Sanitary wastewater generated at the Moss Lake Compressor Station will be treated by an onsite septic system.

The proposed Moss Lake Compressor Station is located within the Northern Humid Gulf Coastal Prairies Level IV ecoregion, within the larger Western Gulf Coastal Plain. This ecoregion is described as flat coastal plain with numerous low circular mounds and sporadic low coastal ridges and indistinct relict fluvial

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[81] LDEQ, LPDES General Permits. Available at: https://www.deq.louisiana.gov/page/lpdes. Accessed July 2022.
[82] *Ibid.*

channels.[83] The proposed Moss Lake Compressor Station is underlain by Prairie Terrace sediments (light gray to light brown clay, sandy clay, silt, sand, and some gravels).[84]

The proposed Moss Lake Compressor Station lies within lands over the Chicot aquifer system. The aquifer is comprised of Holocene to upper Pleistocene deposits of interbedded sand and clay within Permeable Zone A.[85] The Chicot aquifer system makes up the upper part of the Coastal Lowlands aquifer system and underlies approximately 9,000 square miles of southwestern Louisiana.

CP Express will source the proposed Moss Lake Compressor Station's construction water from the local municipal supply. Water used during operation of the Moss Lake Compressor Station will be obtained from an onsite water well. CP Express will comply with all permit conditions and requirements for hydrostatic testing and will develop a Hydrostatic Test Plan. Refer to Section 2.2 of CP Express's December 2021 Resource Report 2 submittal to FERC for more information regarding groundwater and aquifers.[86]

Flooding is the predominant hazard, and CP Express is evaluating various facility design measures that would offer mitigation against the adverse impacts of flooding (e.g., appropriate design and construction plans according to applicable rules and regulations). CP Express will also design flood protection for the proposed Moss Lake Compressor Station based on the storm surge analysis. Refer to Section 6.4 of CP Express's December 2021 Resource Report 6 submittal to FERC and any updates thereto for more information regarding the geologic setting and geological hazards.[87]

5.1.3 Solid Waste and Hazardous Waste Management

CP Express will manage all waste materials in accordance with all applicable local, state, and federal requirements and in an environmentally sound manner to prevent impacts to the environment.

CP Express will not have any on-site solid waste disposal facilities. Any industrial solid waste generated will be disposed off-site. CP Express will comply with the Louisiana Solid Waste Regulations for industrial solid waste generators and for management of such wastes prior to off-site disposal at a permitted disposal facility. It is anticipated that CP Express will generate less than 100 tons per year of solid waste. There is adequate capacity for off-site disposal of industrial solid waste in Calcasieu Parish as well as in neighboring Cameron Parish.

CP Express will generate some hazardous waste; however, CP Express will not own or operate any hazardous waste treatment, storage, or disposal units requiring a permit under the Louisiana Hazardous Waste Regulations. There are no significant process streams generating hazardous waste; the wastes generated will primarily be spent solvents used for maintenance, degreasers, paint wastes, and vessel cleanout materials. It is anticipated that CP Express will generate more than 1.1 tons per month of hazardous waste. There is adequate capacity for off-site disposal of hazardous waste within Louisiana and Texas.

CP Express will comply with all regulations applicable to generators under the Louisiana Hazardous Waste Regulations, including the general requirements of LAC 33:V.Ch.10 Subchapter A (waste determination,

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[83] U.S. EPA, Level III and IV Ecoregions by State, Summary Table: Characteristics of the Ecoregions of Louisiana. Available at https://www.epa.gov/eco-research/ecoregion-download-files-state-region-6#pane-16. Accessed July 2022.
[84] U.S. Geological Survey, Louisiana Geologic Map Data – "lageol.kmz". Available at: https://mrdata.usgs.gov/geology/state/state.php?state=LA. Accessed July 2022.
[85] FERC Docket Number CP22-22-000, Resource Report 2, Accession Numbers 20211202-5104 and 20211202-5105.
[86] *Ibid.*
[87] FERC Docket Number CP22-22-000, Resource Report 6, Accession Numbers 20211202-5104 and 20211202-5105.

satellite accumulation areas, recordkeeping); the preparedness, prevention and emergency procedures of Subchapter D (including a contingency plan); and the pre-transport requirements of Subchapter E (including appropriate manifest tracking). In addition, CP Express will prepare and implement a Waste Minimization Plan as required by LAC 33:V.2245.J and K certified by a licensed professional engineer. All hazardous wastes generated will be appropriately manifested for off-site recycling or disposal at licensed facilities and will be transported only by licensed transporters.

CP Express will require that contractors adhere to all regulatory requirements and to use BMPs to prevent spills. The following BMPs will be implemented:

- All employees and contractors will receive training regarding the handling of fuel, oil, lubricants, and hazardous materials commensurate with their position;
- All equipment used in construction and operation will be inspected at regular intervals;
- Fuel trucks transporting fuel to onsite equipment will travel only on approved access roads or the approved right-of-way;
- All equipment at the construction sites will be fueled at least 100 feet from any waterbody, except for cases where there is no reasonable alternative;
- No hazardous materials, including chemicals, fuels, and oils, will be stored within 100 feet of any waterbody, except as needed and in accordance with the SPCC Plan; and
- Spill response materials will be kept on site per the SPCC Plan.

5.1.4 Biological Resources

CP Express will take measures to mitigate any impacts to existing fish and wildlife resources, plant communities, federal and state listed threatened and endangered species, and federally designated critical habitat that could be potentially impacted by the Moss Lake Compressor Station.

5.1.4.1 Fish

CP Express will construct the Moss Lake Compressor Station on lands that are drained to the Calcasieu-Mermentau Basin. The basin provides both recreational and commercial fishing opportunities. The two fish species most commonly harvested by commercial fishermen in the Calcasieu River basin are the alligator gar (Atractosteus spatula) and the blue catfish (Ictalurus furcatus).[88] Any impacts on fishery resources would occur primarily during construction of the Moss Lake Compressor Station. Direct and indirect impacts to fisheries resources in the immediate vicinity of construction may include:

- Direct mortality of fish due to contact with construction equipment;
- Temporary loss of food resources in the form of relatively immobile prey in the benthic environment;
- Temporary increase in water turbidity within and immediately surrounding the construction work area; or
- Temporary and permanent alteration, addition, or removal of aquatic habitat cover.

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[88] See Section 2.2.1.1 of the Offce of Coastal Management Calcasieu Parish Coastal Zone Management Plan, available at: http://www.dnr.louisiana.gov/assets/OCM/Interagency/LCP/FINALUpdatedCalcasieuParishCZMPlan030617.pdf. Accessed July 2022.

Excavating and dredging will be conducted in accordance with federal and state permits, as well as other applicable laws and regulations (refer to Table 1.9-1 in Appendix 1B in CP Express's December 2021 Resource Report 1 submittal to FERC and any updates thereto).

Additional temporary impacts on waterbodies caused by construction activities such as clearing, grading, and potential spills or leaks will be minimized through implementation of the Project-specific Upland Erosion Control, Revegetation, and Maintenance Plan (Project-specific Plan), Project-specific Wetland and Waterbody Construction and Mitigation Procedures (Project-specific Procedures), and SPCC Plan. Note that the Project-specific Plan and Project-specific Procedures are due to the anticipated U.S. FERC Order to grant authorization under the Natural Gas Act.

5.1.4.1.1 Essential Fish Habitat (EFH)

The Magnuson-Stevens Fishery Conservation and Management Act established a management system for marine fisheries resources in the United States.[89] Specifically, Congress charged the National Oceanic and Atmospheric Administration (NOAA) Fisheries and fishery management councils with identifying habitats essential to managed species. Such habitats are identified as essential fish habitat (EFH). The Moss Lake Compressor Station will be located in the Gulf of Mexico EFH Ecoregion 4 - East Texas and West Louisiana, which extends from the Mississippi Delta in Louisiana to Freeport, Texas.[90]

The Gulf of Mexico Fishery Management Council has not designated EFH at the proposed location of the Moss Lake Compressor Station. A search using the NOAA Fisheries EFH Mapper does not show any essential fish habitat designations in the area of the Moss Lake compressor Station.[91]

5.1.4.2 Wildlife

While the area is inhabited by birds, mammals, and reptiles/amphibians, the proposed location for the Moss Lake Compressor Station is dominated by hay/pasture and cultivated crop land. As noted above, CP Express will adhere to the Project-specific Plan and Project-specific Procedures, which are specifically designed to avoid or minimize impacts on wildlife species and/or their habitats. Even though the construction of the Pipeline Facilities (i.e., pipeline and above-ground facilities) may have impacts on wildlife, CP Express anticipates minimal impacts on wildlife from the proposed Moss Lake Compressor Station. Refer to CP Express's December 2021 Resource Report 3 submittal to FERC and any updates thereto on the construction and operation impacts on wildlife and mitigation measures for the Pipeline System as a whole.

5.1.4.3 Vegetation

CP Express will develop a Project-specific Plan and Project-specific Procedures that are specifically designed to avoid or minimize impacts on vegetation. The Moss Lake Compressor Station will be located entirely within the Western Gulf Coastal Plain Level III Ecoregion, within which is also a Level IV Ecoregion, the Northern Humid Gulf Coastal Prairies.[92] The natural vegetation within this ecoregion is described as a mix of prairie grassland with little bluestem, big bluestem, Indiangrass, brownseed paspalum, switchgrass, and other herbaceous species; riparian forests or gallery forests of bottomland hardwoods. Acreages for vegetation communities and surface waters were estimated for the proposed Moss Lake Compressor Station

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[89] 16 U.S.C. § 1801-1891(d).
[90] FERC Docket Number CP22-22-000, Resource Report 3, Accession Numbers 20211202-5104 and 20211202-5105.
[91] See National Oceanic and Atmospheric Administration, Essential Fish Habitat Mapper. Available at: https://www.habitat.noaa.gov/apps/efhmapper/efhreport/. Accessed July 2022.
[92] FERC Docket Number CP22-22-000, Resource Report 3, Accession Numbers 20211202-5104 and 20211202-5105.

area. These estimates indicated that, 95.7 percent of the acreage is hay/pasture-cultivated crops and 4.3 percent of the acreage is developed.[93]

Multiple hurricanes have affected the Calcasieu-Mermentau Basin, including Hurricane Laura in August 2020. These storm events caused wave action and bottom scour which led to loss of aquatic vegetation and wetlands. Even though the construction of the Pipeline Facilities (i.e., pipeline and above-ground facilities) may have impacts on vegetation, CP Express anticipates minimal impacts on vegetation from the proposed Moss Lake Compressor Station. Refer to CP Express's December 2021 Resource Report 3 submittal to FERC and any updates thereto on the construction and operation impacts on vegetation and mitigation measures for the Pipeline System.

5.1.4.4 Endangered and Threatened Species

Section 7 of the federal Endangered Species Act (ESA) requires federal agencies to ensure that any actions authorized, funded, or carried out by the agencies do not jeopardize the continued existence of a federally listed threatened or endangered species, or result in the destruction or adverse modification of designated critical habitat (DCH) for a federally listed species.[94] The U.S. Fish and Wildlife Service, which is responsible for terrestrial and freshwater species, and the National Marine Fisheries Service, which is responsible for marine and anadromous species, jointly administer the ESA.

Louisiana statutes governing wildlife species protection status are contained in La. R.S. Title 56 (Wildlife and Fisheries),[95] while relevant rules and regulations adopted by the Louisiana Wildlife and Fisheries Commission and the Secretary of the Louisiana Department of Wildlife and Fisheries (LDWF) are found in LAC Title 76. Taking or harassment of wildlife species listed as endangered by the state or under the federal ESA is a violation of state law. Plant species are not assigned state threatened or endangered status. The Secretary of the LDWF is authorized to implement additional restrictions in emergency situations to protect fish and wildlife resources.

Initial scoping through the U.S. Fish and Wildlife Service Information, Planning and Conservation System database and Louisiana Ecological Services list of endangered, threatened, and candidate species by parish, identified state- and/or federally listed species (mammals, birds, mussels, reptiles, and fish) as potentially being present in the vicinity of the proposed Moss Lake Compressor Station. Refer to CP Express's December 2021 Resource Report 3 submittal to FERC and any updates thereto).[96]

CP Express conducted an initial review of each species potentially impacted by the proposed Moss Lake Compressor Station. Documentation of this review was sent to the U.S. FWS on April 19, 2021, to request technical assistance, to verify the list of species, and to obtain feedback on field survey protocols for those species which may require a survey. CP Express is undergoing informal consultation with the U.S. FWS regarding the effects determinations for the listed species that could potentially occur near the proposed Moss Lake Compressor Station. Refer to Sections 3.5 and 3.6 of CP Express's December 2021 Resource Report 3 submittal to FERC and any updates thereto for potential impacts on specific federal and state threatened or endangered species under U.S. FWS jurisdiction.[97]

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[93] FERC Docket Number CP22-22-000, Resource Report 8, Accession Numbers 20211202-5104 and 20211202-5105.
[94] 16 U.S.C. § 1536(a)(2).
[95] La. R.S. Title 56, in particular, Part IV Threatened and Endangered Species Conservation.
[96] FERC Docket Number CP22-22-000, Resource Report 3, Accession Numbers 20211202-5104 and 20211202-5105, specifcially Tables 3.5.1-1, 3.5.2-1, and 3.5.3-1.
[97] *Ibid.* See also additional correspondence between CP2 LNG and U.S. Fish and Wildlife Service in Appendix 3B of Resource Report 3.

5.1.5 Site Safety and Security

The Moss Lake Compressor Station is subject to the safety requirements enacted by the federal Pipeline and Hazardous Materials Administration (PHMSA) in 49 C.F.R. Part 192. These regulations include standards and requirements for design, construction, testing, operation, maintenance, and emergency response. These rules are specifically designed to prevent leaks and accidental releases and to ensure the safety of facility workers and the public. An analysis of the facility's compliance with Part 192 is included in CP Express's December 2021 Resource Report 11.[98]

CP Express designed the Moss Lake Compressor Station and will structure operations such that the facility meets the stringent safety requirements of 40 C.F.R. Part 192, is safe and such that potential environmental impacts will be minimized. Further, CP Express will meet or exceed all existing environmental regulations in a manner that minimizes the potential for accidental releases. Safety and security systems in place will include:

- Security fencing restricting access to authorized personnel;
- Spill and leak containment for liquids;
- System controls that will operate 24 hours per day, 7 days per week, to monitor the Pipeline system with sophisticated computer and telecommunications equipment that can detect pressure fluctuations and control flows and to ensure the Pipeline will be operated in accordance with DOT PHMSA regulations.
- Emergency Shut Down (ESD) system to prevent escalation of hazards from accidents or equipment failure;
- Fire protection systems; and
- Gas, fire, and spill detection systems in combination with manual alarm call points.

5.1.6 Floodplains

Floodplains are defined as low-lying areas adjacent to rivers and streams susceptible to inundation during periods of high flow or discharge. Floodplains attenuate stormwater flow and provide erosion and sediment control, nutrient input, and wildlife habitat. The Moss Lake Compressor Station is located in Zone VE, which is subject to the 1 percent annual chance flood event with additional hazards due to storm-induced velocity wave action.[99]

The Moss Lake Compressor Station will be located in the 100-year floodplain. Construction of the Moss Lake Compressor Station within floodplains could permanently reduce flood storage capacity if soil or surface features with a greater flood storage capacity are displaced. CP Express developed a Floodplain Mitigation Plan that identifies the measures that will be implemented to mitigate potential flooding at the Moss Lake Compressor Station. The volume of lost flood storage capacity from construction of the Moss Lake Compressor Station will be limited to where grading occurs to elevate the ground surface above the flood elevation. The proposed Moss Lake Compressor Station will be constructed according to all applicable rules and regulations, including local floodplain management requirements.[100]

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[98] FERC Docket Number CP22-22-000, Resource Report 11, Accession Numbers 20211202-5104 and 20211202-5105.
[99] Entering the compressor station location in the search feature of the FEMA Flood Map Service Center shows the FEMA flood plain zones. Available online at: https://msc.fema.gov/portal/home. Accessed July 2022.
[100] FERC Docket Number CP22-22-000, Resource Report 2, Accession Numbers 20211202-5104 and 20211202-5105.

5.1.7 Summary

As described above, CP Express has designed facilities, planned construction, and structured operations to minimize environmental and community impacts to the extent practicable. Further, CP Express has implemented a range of site selection, design, construction, and operational measures to minimize or avoid potential adverse environmental impacts to the extent practicable. Specifically, the Moss Lake Compressor Station will not result in exceedance of any ambient air or water standards. These measures will allow the Moss Lake Compressor Station to meet or exceed federal, state, and parish environmental regulations and permit conditions.

5.2 Question 2

Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?

Response:

Yes. As detailed in the subsequent sections, the social and economic benefits of the Moss Lake Compressor Station outweigh any potential environmental impacts costs. Based on the response to Question 1 in the prior section, CP Express established that the potential adverse environmental impacts are minimal. Additionally, CP Express has initiated design and planning measures to avoid or mitigate such impacts to the extent possible. Thus, this section focuses largely on the social and economic benefits of the Moss Lake Compressor Station.

5.2.1 Moss Lake Compressor Station Needs and Opportunities

There is a proven market demand and need for LNG export to overseas markets. The U.S. has experienced significant advances in natural gas drilling and production technologies in recent years, which have led to broad access to U.S. natural gas reserves. The Moss Lake Compressor Station will support CP Express with the necessary infrastructure to transport domestic natural gas to the planned Terminal Facilities for conversion to LNG for storage and export. Thus, the Moss Lake Compressor Station is critical to the overall planned LNG export operations which will have far-reaching global impacts such as aiding decarbonization efforts in partnership with renewables and as a replacement to highly carbon-intensive power sources in developing economies, especially in Asia.[101] In addition, LNG exports are of significant importance to the United States and its allies to combat the Russian aggression in Ukraine.[102]

Summarized below are the main benefits associated with the Moss Lake Compressor Station:

- **Direct Job Creation/Employment Sustainability:** A combined peak construction workforce of up to 1,300 workers for Phase 1 and Phase 2 will be employed for the Pipeline System. However, the number of workers present at different stages of construction will vary. Initial mobilization will involve approximately 500 workers for Phase 1. As construction activity increases, the workforce will average about 680 workers, increasing during construction and then decreasing as the facilities near completion

[101] Forbes, U.S. LNG: A World Of Benefits Beyond Price. Available at: https://www.forbes.com/sites/thebakersinstitute/2021/06/24/us-lng-a-world-of-benefits-beyond-price/?sh=22f271481e9c. Accessed July 2022. See also: https://www.lngfacts.org/lng-export-markets/

[102] The Hill, 5 Things to Know about Liquified Natural Gas and its Role in the Ukraine Crisis. Available at: https://thehill.com/policy/energy-environment/3262830-5-things-to-know-about-liquefied-natural-gas-and-its-role-in-the-ukraine-crisis/. Accessed July 2022.

and when facility start-up takes place. Construction is anticipated to take approximately 36 months for both phases. After completion of Phase 1, approximately 10 full-time employees will be employed for the Pipeline System with salaries commensurate with industry standards.

- **Economic Benefits:** In addition to job creation to support construction and permanent employment during operation, the Moss Lake Compressor Station will generate payroll taxes, income taxes, sales tax revenue, and property tax revenue. These benefits will inure to the benefit of federal, state, and local governments. Economic benefits also include a multiplier impact in that for the 10 direct permanent jobs, there will likely also be additional indirect employment opportunities in the region due to servicing the facility and the new permanent employees. CP2 LNG and CP Express anticipate spending approximately $1 billion on materials and procured services during construction of the Project. These indirect jobs will result in added earnings for local households, increased regional business activity, and increased spending due to workers relocating temporarily or permanently from other towns.
- **Decarbonization Benefits:** The Moss Lake Compressor Station is an integral part of the CP Express Pipeline network supporting the transportation of natural gas to associated Terminal Facilities. Thus, the Moss Lake Compressor Station significantly contributes to the LNG export operations. In addition to meeting the future needs and demand of the global LNG market, the Moss Lake Compressor Station will also be supporting global decarbonization efforts via replacement of frequently used carbon-intensive fuels such as coal with LNG.

5.2.1.1 Anticipated Positive Socioeconomic Effects

The Moss Lake Compressor Station, together with the remainder of the Pipeline System and Terminal Facilities, will exceed $10 billion in capital investment will inject substantial income into the regional economy. Thus, the Moss Lake Compressor Station will contribute to a positive impact on the economy during both the construction and operation phases. Considerable socioeconomic benefits will result from material purchases (e.g., concrete, fuel supply, and miscellaneous consumables), construction contracts, and employment opportunities within the region. Additionally, development of the Moss Lake Compressor Station will create substantial direct and indirect economic benefits during construction and operation of the facilities. The majority of the economic benefits will be primarily in Southwest Louisiana, specifically in Cameron and Calcasieu Parishes. Additional economic benefit is also anticipated throughout the state and region via a multiplier impact from expenditures on housing, food, clothing, recreation, etc. by the temporary and permanent workers and associated service industry workers.

For the Pipeline System, a combined peak of 1,300 construction workers (including skilled workers such as welders and pipefitters) is expected for Phases 1 and 2. It is anticipated that workers associated with the construction of the Moss Lake Compressor Station will primarily live in Calcasieu Parish due to proximity to the site and higher accommodation availability. Due to the high number of construction workers, local lodging (rents and mortgages), gas stations, food, entertainment, and other businesses selling commonly required goods and services will experience increased revenue. In addition, Cameron and Calcasieu Parishes and the state will collect a substantial increase in sales and income taxes associated with these workers' spending and income within the area. Cameron Parish has no parish-level sales tax, but Calcasieu Parish has a sales tax rate ranging from 4.25 percent to 7.75 percent and the state sales tax rate is 4.45 percent.[103, 104]

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[103] Louisiana Department of Revenue, General Sales & Use Tax. Available at: https://revenue.louisiana.gov/SalesTax/GeneralSalesAndUseTax. Accessed July 2022.
[104] Louisiana Association of Tax Administrators. Available at: https://lataonline.org/for-taxpayers/city-to-parish-index/calcasieu/. Accessed July 2022.

These sales tax rates combined with the high number of construction workers is projected to lead to a large accrual of revenue. As an example, construction workers may spend some of their income locally.[105] Specifically, for the Pipeline System, the average workforce for the duration of the construction of both phases will be 680 workers, with average annual salaries in line with industry standard. The duration of construction is 36 months (18 months for Phase 1 and 18 months for Phase 2) for the Pipeline System. Thus, construction labor expense will further generate income taxes. Also, this spending will result in increased revenues for Calcasieu and Cameron Parishes and the State of Louisiana. This revenue does not include any CP Express direct taxes paid during the construction phase or any paid property taxes. Those taxes will be used to support important state and federal social services as well as capital expenditures for infrastructure development.

During the operations phase, the Moss Lake Compressor Station will continue to generate economic benefits in the region. After the completion of Phase 1, approximately 10 full-time workers will be hired for Pipeline System and are expected to live and spend a portion of their income within Calcasieu and Cameron Parishes. In addition to stimulating state and local business activity, this spending will generate sales tax at the local and state level.

Many public benefits are associated with the economic benefits described above, such as:

- CP Express will pay high property taxes, which will assist the Calcasieu Parish school district;
- CP Express will pay sales and use taxes for equipment and other purchases, which will be used to support state and local government functions; and
- CP Express jobs will result in workers paying state and federal income taxes that will also fund public services.

Additionally, CP Express will be committed to being a good neighbor and having a positive impact to the community of Moss Lake as well as to Calcasieu Parish. As evidenced by the charitable and civic actions of its parent company, Venture Global LNG, over the prior years in Cameron Parish, such good will and community impact included:

- Through a cooperative endeavor agreement with Cameron Parish for Lighthouse Bend, a Venture Global funded 58-acre site along the Calcasieu Pass waterway known as for Lighthouse Bend. Lighthouse Bend is designed to bolster the local economy and provide recreational opportunities for the community and will include a marina, bar, restaurant, market, and RV park;
- Donations to local charities including Catholic Charities of Southwest Louisiana to provide meals during the pandemic and hurricanes;
- Regular sponsorship and support of community events and festivals; and
- Assistance to local community recovery efforts after hurricanes and other severe weather, including providing fuel, materials, services and shelter.

5.2.1.2 Potential Negative Socioeconomic Effects

Due to the temporary influx of non-local workers and their family members, construction of the Moss Lake Compressor Station has the potential for short-term impacts on the availability of local housing and accommodations as well as public services such as police, fire, and healthcare. However, the current housing and accommodations market as well as fire, safety, and medical services in Calcasieu Parish, and

[105] FERC Docket Number CP22-22-000, Resource Report 5, Accession Numbers 20211202-5104 and 20211202-5105.

the surrounding area, are adequate for the existing population and should be able to sustain any demand increase by the temporary construction workforce and activities.

Impacts on government facilities and services are also expected to be minor. CP Express will work with local public officials to address planning needs to minimize any public service impacts associated with the increased construction workforce.

Long-term socioeconomic impacts on public services directly related to operation of the Moss Lake Compressor Station is expected to be minimal. This is due to the fact that the addition of approximately 10 permanent operational staff does not represent a significant population increase and their needs will not affect the current level of service offered by local public services providers.

These minimal public costs will be offset by additional parish and state tax revenues generated by CP Express, including an increase in employment/business activity.

5.2.2 Environmental Justice

The state and federally required environmental justice (EJ) review of proposed major new facilities and major expansion projects that trigger PSD and Title V is a component of this EAS (see Question 2). As a state environmental regulatory agency that receives federal funds for its Title V and PSD programs, LDEQ must abide by U.S. Executive Order (EO) 12898, which requires an EJ review when making major environmental permitting decisions. EO 12898 specifically requires that LDEQ identify whether a proposed permit will result in any "disproportionately high and adverse human health or environmental effects" on minority or low-income populations.

Based on the analysis presented below, the Moss Lake Compressor Station will not disproportionately affect low-income or minority populations. There will be no high, adverse environmental impacts on nearby populations as the proposed facility will comply with all applicable environmental rules, including ambient air and water standards that have been established to ensure protection of human health with a margin of safety.

Executive Order 12898 – *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* – was issued in February 1994. Its purpose is to focus federal attention on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities.[106] Specifically, this EO recognizes the importance of using the National Environmental Policy Act (NEPA) process to identify and address, as appropriate, any disproportionately high and adverse health or environmental effects of federal programs, policies, and activities on minority populations and low-income populations.[107] Further, in January 2021, President Biden issued EO 14008 – *Executive Order on Tackling the Climate Crisis at Home and Abroad*, which requires federal agencies to "make achieving environmental justice part of their missions."[108]

The environmental justice analysis below is based on the approach outlined by the Council on Environmental Quality (CEQ) and the U.S. EPA. The analysis follows federal guidelines and methodologies to assess the

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[106] U.S. EPA, Summary of Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. Available at: https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice. Accessed July 2022.

[107] *Ibid.*

[108] The White House, Briefing Room, Executive Order 14008, Executive Order on Tackling the Climate Crisis at Home and Abroad. Available at: https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/. Accessed July 2022.

potential for the proposed Moss Lake Compressor Station to have disproportionately adverse impacts on minority or low-income populations.

Specifically, the CEQ requests that federal agencies (and states that receive federal funding for their environmental programs) actively scrutinize the following issues with respect to environmental justice (consistent with EO 12898):[109]

- The racial and economic composition of affected communities;
- Health-related issues that may amplify project effects on minority or low-income individuals; and
- Public participation strategies, including community or tribal participation in the process.

The U.S. EPA's Environmental Justice policies focus on enhancing opportunities for residents to participate in the decision-making process. The U.S. EPA states that environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.[110] Further, fair treatment means no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.[111] In addition, meaningful involvement means:[112]

- People have an opportunity to participate in decisions about activities that may affect their environment and/or health;
- The public's contribution can influence the regulatory agency's decision;
- Community concerns will be considered in the decision-making process; and
- Decision makers will seek out and facilitate the involvement of those potentially affected.

5.2.2.1 Environmental Justice Areas Analysis

The Interagency Working Group on Environmental Justice (IWG) explains that a minority population may be present if the minority population percentage of the affected area is "meaningfully greater" than the minority population percentage in the general population or other "appropriate unit of geographic analysis."[113] The IWG provides a numeric measure of over 50 percent of the affected area.[114] The term "affected area" is not defined by the IWG, but guidance states it should be interpreted as "that area which the proposed project will or may have an effect on."[115] The IWG also advises agencies not to "artificially dilute or inflate" the affected minority population when selecting the appropriate unit of geographic analysis.[116]

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[109] U.S. EPA, Council on Environmental Quality, Environmental Justice – Guidance under the National Environmental Policy Act. Available at: https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf. Accessed July 2022.
[110] U.S. EPA, Learn About Environmental Justice. Available at: https://www.epa.gov/environmentaljustice/learn-about-environmental-justice. Accessed July 2022.
[111] *Ibid.*
[112] *Ibid.*
[113] U.S. EPA, Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses. Available at: https://www.epa.gov/sites/production/files/2015-04/documents/ej-guidance-nepa-compliance-analyses.pdf. Accessed July 2022.
[114] *Ibid.*
[115] *Ibid.*
[116] *Ibid.*

A key element here, according to the IWG, is the selection of the appropriate level of geographic analysis; that is, selecting a comparison population to which the population in the affected area will be compared to identify if there are "meaningfully greater" percentages.[117] The selection of the appropriate unit of geographic analysis may be a governing body's jurisdiction, a neighborhood census tract, or other similar unit, which is done to prevent artificial dilution or inflation of the affected minority population.[118] The census block group (CBG) is the smallest geographic unit for which U.S. Census Bureau demographic data are available. The proposed Moss Lake Compressor Station is located in the Census Tract (CT) 32, Block Group (BG) 2 in Calcasieu Parish. The CBG was selected as the appropriate geographic unit for analysis for purposes of determining whether environmental justice populations are in the area that may be affected by construction and operation of the proposed Moss Lake Compressor Station, and the Parish was used as the comparative population. Based on the significant impact level air dispersion modeling analysis performed for the Moss Lake Compressor Station (see Appendix G to this application), the maximum area of impact was determined to be approximately a 1-mile radius of the facility. Therefore, CT 32, BG 2 was reviewed to identify environmental justice populations and evaluate potential disproportionate adverse impacts on environmental justice populations from the proposed Moss Lake Compressor Station.

The demographic indicators pertaining to the environmental justice analysis were evaluated based on the 2020 American Community Survey 5-Year Estimates tables (File # B17017 and File # B03002).[119]

Table 5-1. Environmental Justice Demographic Indicators: Race and Ethnicity[1]

Geographical Area	Total Population	White (Not Hispanic), %	Black or African American, %	American Indian and Alaskan Native, %	Asian, %	Native Hawaiian and Other Pacific Islander, %	Hispanic or Latino, %	Some Other Race, %	Two or More Races, %	Minority Population, %
Louisiana	4,664,616	58.3	31.9	0.5	1.7	<0.1	5.2	0.3	2.0	41.7
Calcasieu Parish	202,858	66.9	25.1	0.2	1.5	0.0	3.8	0.1	2.3	33.1
CT 32, BG 2	877	95.6	0.0	0.0	0.3	0.0	2.1	0.0	2.1	4.4

Source: U.S Census Bureau. Available at: https://data.census.gov/cedsci/. Accessed July 2022.
[1] U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates, Table B03002.

[117] *Ibid.*
[118] *Ibid.*
[119] United States Census Bureau. Available at: https://data.census.gov/cedsci/. Accessed July 2022.

Table 5-2. Environmental Justice Demographic Indicators: Income, Age, Language, and Education

Geographical Area	Population Below Poverty[1], %	Low-Income Population[2], %	Linguistically Isolated[3], %	Population Under Age 5[4], %	Population Over Age 64[4], %	Population with less than High School Education[5], %
Louisiana	18.1	38.2	1.4	6.5	15.4	14.3
Calcasieu Parish	15.8	36.1	0.7	7.2	14.7	12.5
CT 32, BG 2	14.3	24.3	0.0	6.7	20.4	7.7

Source: U.S. Census Bureau. Available at: https://data.census.gov/cedsci/. Accessed July 2022.
[1] U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates, Table B17017.
[2] U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates, Table C17002.
[3] U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates, Table B16004.
[4] U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates, Table B01001.
[5] U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates, Table B15003.

5.2.2.1.1 Impacts on Minority Communities

The proposed Moss Lake Compressor Station is located entirely in CT 32, BG 2 with a total population of 877. As shown in Table 5-1, the total minority population for CT 32, BG 2 is 4.4 percent. The U.S. EPA guidelines for identifying an environmental justice area provide that either the area must have a "meaningfully greater" percentage of minorities than the reference population (i.e., Calcasieu Parish for this analysis) or the minority population must be greater than 50 percent.[120] Based on these criteria, the proposed Moss Lake Compressor Station is not in an environmental justice area with respect to minority communities.

5.2.2.1.2 Impacts on Low Income Communities

Based on the U.S. Census Bureau 2016-2020 American Community Survey data as shown in Table 5-2, approximately 14.3 percent of the population for CT 32, BG 2 is below poverty, compared to 15.8 percent of the population in Calcasieu Parish. Since the percentage of the population below poverty in CT 32, BG 2 is less than the population below poverty in the reference population (Calcasieu Parish), the proposed Moss Lake Compressor Station is not in an environmental justice area with respect to low income communities.

5.2.2.1.3 Public Participation

According to the National Environmental Justice Advisory Council (NEJAC), there are many terms that describe the concept of public participation including community participation, community involvement, community engagement, stakeholder involvement, and stakeholder engagement.[121] Public participation and community involvement are crucial in ensuring that decisions affecting human health and the environment acknowledge and avoid environmental justice impacts.[122]

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[120] U.S. EPA, Technical Guidance for Assessing Environmental Justice in Regulatory Analysis. Available at: https://www.epa.gov/sites/default/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf. Accessed July 2022.
[121] U.S. EPA, National Environmental Justice Advisory Council, Model Guidelines for Public Participation – An Update to the 1996 NEJAC Model Plan for Public Participation (January 2013). Available at: https://www.epa.gov/sites/production/files/2015-02/documents/recommendations-model-guide-pp-2013.pdf. Accessed July 2022.
[122] *Ibid.*

Recognizing the importance of public involvement, CP Express developed a public participation plan designed to facilitate stakeholder communications and to provide the public with information related to the Moss Lake Compressor Station. CP Express aims to establish a good corporate citizen reputation through robust outreach and forming forthright working relationships with local government and communities. CP Express views maintaining open and transparent discussions with local communities, elected and non-elected officials, landowners, and other stakeholders as an integral part of responsible business conduct and recognizes that engagement requires forging mutually beneficial relationships based upon the trust that comes by consistently being a good neighbor and working directly with the local community in Calcasieu Parish.

The CP Express public participation plan will be implemented and will evolve through all phases of the development, construction, and operation of the proposed Moss Lake Compressor Station. The goals of the public participation plan are to:

- Inform communities, elected officials, landowners, and other stakeholders about the proposed Moss Lake Compressor Station through regular and direct communication;
- Facilitate comment opportunities for interested stakeholders to pose questions or express concerns, which CP Express will take into consideration and, when possible, let stakeholders know how their input influenced the Moss Lake Compressor Station;
- Communicate fact-based information about the proposed Moss Lake Compressor Station in a timely manner; and
- Establish an internal feedback and input process for questions, issues, and information requests raised by stakeholders.

CP Express will work in good faith with stakeholders to identify and address issues early and proactively. The public consultation team, with the support of the constituent departments of the CP Express team (e.g., engineering, construction, legal, external affairs, and environmental compliance) will collaborate to implement this public participation plan. Key elements of CP Express's outreach program include:

- Identifying and meeting with local associations, affected public groups, and other nongovernmental organizations with whom CP Express will communicate about the proposed Moss Lake Compressor Station and any potential impacts to the community or stakeholder's interests on an ongoing basis;
- Designating a single point of contact, Ms. Jessica Wickett, Vice President of External Affairs, for the public to direct comments and questions;
- Establishing a website presence (https://ventureglobalIng.com/cp2-lng/pipeline/), a project e-mail address (CP2LNG@ventureglobalIng.com), a toll-free project phone number (1-800-514-0833), and a project mailing address (1001 19th Street North, Suite 1500, Arlington, VA 22209);
- Conducting consultation meetings with community leaders and elected officials on a regular basis;
- Hosting a series of open house meetings for communities, elected officials, landowners, and other stakeholders;
- Producing and distributing informational materials regarding the proposed Moss Lake Compressor Station, including letters to affected landowners, notifying them of the start of construction;
- Supporting on-going public outreach throughout the life of the proposed Moss Lake Compressor Station; and

- Documenting and responding to questions and issues raised through this iterative engagement process.

The CP Express team will gather stakeholder contact information to include elected officials and staff (local, state, and federal), community leaders, tribal leaders, landowners, state and federal agencies associated with the Moss Lake Compressor Station, news media, libraries, and other interested stakeholders. The contact information for all stakeholders will be maintained for use in the distribution of information about the proposed Moss Lake Compressor Station (e.g., fact sheets, regulatory mailings, letters of invitation, newsletters). The CP Express team will distribute regular mailings and/or newsletters to affected landowners near the Moss Lake Compressor Station, which will enable involvement of stakeholders without internet access.

CP Express will engage with community leaders and elected officials at the local, state, and federal levels with jurisdiction or interest near the proposed Moss Lake Compressor Station area. Additionally, CP Express will complete one-on-one meetings with or contact via letter the elected officials in the vicinity of the Moss Lake Compressor Station to alert them to the proposed compressor station. CP Express will notify contacts and continue to expand the stakeholder network prior to the public open house meetings and will identify and conduct outreach with other stakeholders, including emergency responders and community groups.

CP Express's public outreach, engagement, and participation efforts are currently underway. CP Express provided landowners and other stakeholders with an informational letter on February 24, 2021.[123] In addition, introduction letters were sent to federal, tribal, state, and local agencies with permitting and/or consultation authority over the proposed Moss Lake Compressor Station (refer to Table 1.9-1 (Appendix 1B) in CP Express's Resource Report 1 submittal to FERC in December 2021).[124] CP Express hosted a public open house meeting in Calcasieu Parish, Louisiana on April 7, 2021.[125] Landowners and other stakeholders were notified of the open houses in the February 2021 informational letters. CP Express also notified the public of the open houses by running advertisements in the local newspapers and posting informational signs in the Moss Lake Compressor Station area. Landowners who attended were primarily interested in whether and where the pipeline route would cross their properties, the use of eminent domain authority, and the process for obtaining an easement across their land. Other topics raised by attendees included the anticipated design life of the pipeline and potential effects of the Moss Lake Compressor Station on landowner mineral rights and future oil and natural gas projects/expansions.[126] CP Express is dedicated to continued engagement with the public and community and will continue to meet with various groups and individuals regarding the proposed Moss Lake Compressor Station.

All of the material environmental permits for the Moss Lake Compressor Station require public notice and public comment. Most of these permit programs also provide for an opportunity to request a public hearing. The issuance of proposed Title V/PSD requires a minimum 30-day public comment period and the opportunity for a public hearing with 30 days advance notice of such hearing. Moreover, LDEQ posts the permit application materials to its Electronic Data Management System[127] within a short period of time after submission, affording the public ample time to review application materials.

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[123] FERC Docket Number CP22-22-000, Resource Report 1, Accession Numbers 20211202-5104 and 20211202-5105.
[124] *Ibid.*
[125] *Ibid.*
[126] FERC Docket Number CP22-22-000, Resource Report 1, Accession Numbers 20211202-5104 and 20211202-5105.
[127] LDEQ, Electronic Data Management System. Available at: https://edms.deq.louisiana.gov/edmsv2/quick-search. The Agency Interest number for CP Express is 232173. Accessed July 2022.

5.2.2.2 Conclusions

As discussed in Section 5.1 above, CP Express expects no significant adverse environmental impacts from the Moss Lake Compressor Station, including on minority or low-income populations. The lack of adverse effects is summarized below.

With regard to air impacts, the emissions from the proposed Moss Lake Compressor Station will not result in the exceedance of any federal or state ambient air standard. The LDEQ maintains an extensive ambient air quality monitoring network made up of stationary ambient air monitoring stations. From these sites, Department personnel collect direct measurements of air pollutant concentrations, analyze, and interpret the data. The data collected is used to track trends in air quality and to determine compliance with NAAQS. Based on these data collected from air monitoring stations in Calcasieu Parish, the State of Louisiana and U.S. EPA have determined that the entire region around Calcasieu Parish currently meets all federal NAAQS.

Federal and State NSR and PSD regulations mandate that certain air quality protection demonstrations be conducted by the permittee using computer simulations before a major source air emissions permit may be issued. These demonstrations were conducted by CP Express using approved air dispersion modeling techniques. The modeling showed that the air emissions from the Moss Lake Compressor Station will not cause or contribute to an exceedance of any NAAQS. Because these standards are conservatively established to be protective of human health with a margin of safety, there is reasonable assurance from such modeling analysis that no public areas will be adversely impacted by emissions from the Moss Lake Compressor Station. As such, the CP Express modeling results further support there is not a disparate adverse impact on any protected population. Moreover, beyond meeting the ambient standards, CP Express will meet the BACT requirements of the PSD Program.

Federal and state water quality regulations apply to industrial wastewater and require that any discharges meet stringent standards. In addition to requiring a discharge permit with numerical loading limitations for any industrial wastewater, if applicable the LDEQ will conduct evaluations to ensure there is no impairment of the receiving streams by Moss Lake Compressor Station discharges that would result in ambient water quality exceedances. Compliance with the required SPCC Plan will ensure that potential impacts to groundwater and surface water from any spills would be prevented or minimized.

Despite a thorough evaluation of alternative project sites and minimization of the overall plant footprint, the Moss Lake Compressor Station will have unavoidable impacts on wetlands. CP Express will mitigate unavoidable impacts on wetlands through the USACE and LDNR permitting processes, including appropriate compensatory mitigation for the permanent loss of wetlands.

Industrial solid wastes and hazardous wastes will be minimized and recycled to the maximum extent possible, and no waste will be disposed of on the Moss Lake Compressor Station property. Industrial solid and hazardous waste generated at the Moss Lake Compressor Station will be disposed off-site at a permitted disposal facility.

The Moss Lake Compressor Station will be located in the 100-year floodplain. CP Express developed a Floodplain Mitigation Plan that identifies the measures that will be implemented to mitigate potential flooding at the Moss Lake Compressor Station. The proposed Moss Lake Compressor Station will be constructed according to all applicable rules and regulations, including applicable local floodplain management requirements.

CP Express will continue informal consultation with the U.S. FWS regarding the effects determinations for the listed species that could potentially occur near the proposed Moss Lake Compressor Station.

In conclusion, CP Express believes the need for the proposed Moss Lake Compressor Station, coupled with the economic benefits that it will bring to the area, outweigh the less than significant environmental impacts.

5.3 Question 3

Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing non-environmental benefits?

Response:

No alternative projects would offer more protection to the environment than the proposed Moss Lake Compressor Station without unduly curtailing non-environmental benefits.

CP Express analyzed the following alternatives to the proposed Moss Lake Compressor Station to determine if any will have significant environmental advantages as compared to the proposed Moss Lake Compressor Station: no-action alternative, electrical compressor alternatives, and site alternatives. CP Express utilized aerial photographs, USGS topographic maps, NWI maps, Rextag Mapping Data, public scoping comments, and agency input from multiple federal and state agencies to evaluate each alternative based on the following criteria:[128]

- Ability of the alternative to meet the proposed Moss Lake Compressor Station's purpose and need;
- Economic and technical feasibility of the alternative; and
- Whether the alternative has significant environmental advantages over the proposed Moss Lake Compressor Station.

Below is a summary of each alternative considered.

5.3.1 No-Action Alternative

This alternative would entail not constructing any variation of the proposed Moss Lake Compressor Station. Although the potential minimal adverse environmental impacts discussed in Section 5.1 would be avoided under this alternative, it would also preclude the primary objective of the Moss Lake Compressor Station: providing the required compression to transport natural gas to the Terminal Facilities for subsequent liquefaction, storage, and export to overseas markets. Based on the lack of infrastructure required to provide natural gas to the Terminal Facilities, CP Express does not consider adoption of the no-action alternative to be a viable proposition.

Further, this alternative also would not provide the potential economic benefits as discussed in Section 5.2, including increased jobs, secondary spending, and tax revenues.

5.3.2 Electric Compressor Alternatives

CP Express evaluated the feasibility of utilizing electric motor-driven compressors in lieu of natural gas-fired turbines for compression power for the Moss Lake Compressor Station. Notable advantages of operating electric motor-driven compressors include:

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[128] FERC Docket Number CP22-22-000, Resource Report 10, Accession Numbers 20211202-5104 and 20211202-5105.

- No air emissions or associated permitting requirements;
- Reduced noise levels at nearby noise sensitive areas (NSAs); and
- Less routine and long-term maintenance.

As part of its evaluation of this alternative, CP Express studied the existing electric transmission systems in the vicinity of the Moss Lake Compressor Station. A major consideration in determining the feasibility of electric motor-driven compressors is the availability and proximity of electric power capable of supplying the compressor station's electrical load. The results of the study concluded that a nearby, existing 230 kilovolt transmission line would require upgrades to provide adequate power to meet the electrical load. Further, due to the necessary upgrades, a new substation with a footprint of 2 to 3 acres would be required within or adjacent to the Moss Lake Compressor Station.

Additional factors that need to be considered when evaluating this alternative:

- The Moss Lake Compressor Station will require a continuous, reliable power supply to avoid shut down, which would in turn result in a shutdown of the Terminal Facilities. The reliability of external electric power transmission could be unpredictable due to the overhead electric transmission lines being susceptible to damage caused by hurricanes, severe cold weather spells, and other major storm events. Such major weather events are not uncommon for Calcasieu Parish, resulting in some power outage durations lasting days or weeks; and
- Although this alternative would reduce air pollutant emissions at the Moss Lake Compressor Station, the potential for increased air pollutant emissions from the external source of electric generation would exist. This effectively would result in the transfer of air pollutants from one geographic location to another, and may not result in any net benefit for the region's air quality.

For the reasons discussed above, CP Express does not consider utilization of electric-motor driven compressors at the Moss Lake Compressor Station to be a viable proposition.

5.3.3 Site Alternatives

Site location alternatives and selection criteria for the Moss Lake Compressor Station are discussed below in the response to Question 4.

5.3.4 Summary

The analysis of the alternative projects above supports the selection of the Moss Lake Compressor Station. Specifically, CP Express believes that the Moss Lake Compressor Station, as proposed, offers more protection to the environment than the aforementioned alternatives discussed above.

5.4 Question 4

Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits?

Response:

No alternative sites would offer more protection to the environment than the proposed Moss Lake Compressor Station site without unduly curtailing non-environmental benefits for reasons discussed below. Refer to Appendix A of this application for an area map of the Moss Lake Compressor Station.

As part of its site selection process conducted in 2021, CP Express evaluated alternative sites to determine if any would have significant environmental advantages when compared to the selected site. However, none provided the same favorable siting conditions as that of the proposed site for the Moss Lake Compressor Station. Key criteria evaluated by CP Express included:

- Optimum horsepower and location requirements for transportation of the proposed natural gas volumes;
- Availability of potential compressor station sites adjacent to the pipeline route;
- Presence of suitable access roads and location of ancillary facilities (e.g., electric distribution lines);
- Avoidance or minimizing impacts on forestland, wetlands, and waterbodies; and
- Site location as far from NSAs as practicable.

Based on hydraulic modeling, CP Express concluded that a compressor station located at the Florida Gas Transmission (FGT) interconnect at MP 30.7, including downstream of this point, is the ideal location from a hydraulics perspective. Compressor station sites located north of the FGT system were not evaluated further because they would require booster compression on the FGT system to meet the CP Express operating pressure. CP Express then identified and evaluated the availability of potential compressor station sites adjacent to the pipeline route utilizing the key criteria noted above.

Table 5-3 provides the preliminary environmental comparison evaluated in 2021 of the four sites identified as meeting the key criteria: two sites near Moss Lake, Louisiana (Moss Lake Alternative A site (proposed site), and Moss Lake Alternative B site) and two sites near Vinton, Louisiana (Vinton Alternative A site and Vinton Alternative B site). Figure 5-2 shows the alternative site locations.[129] The following sections provide additional information reviewed in 2021 to determine the most favorable location for the compressor station.

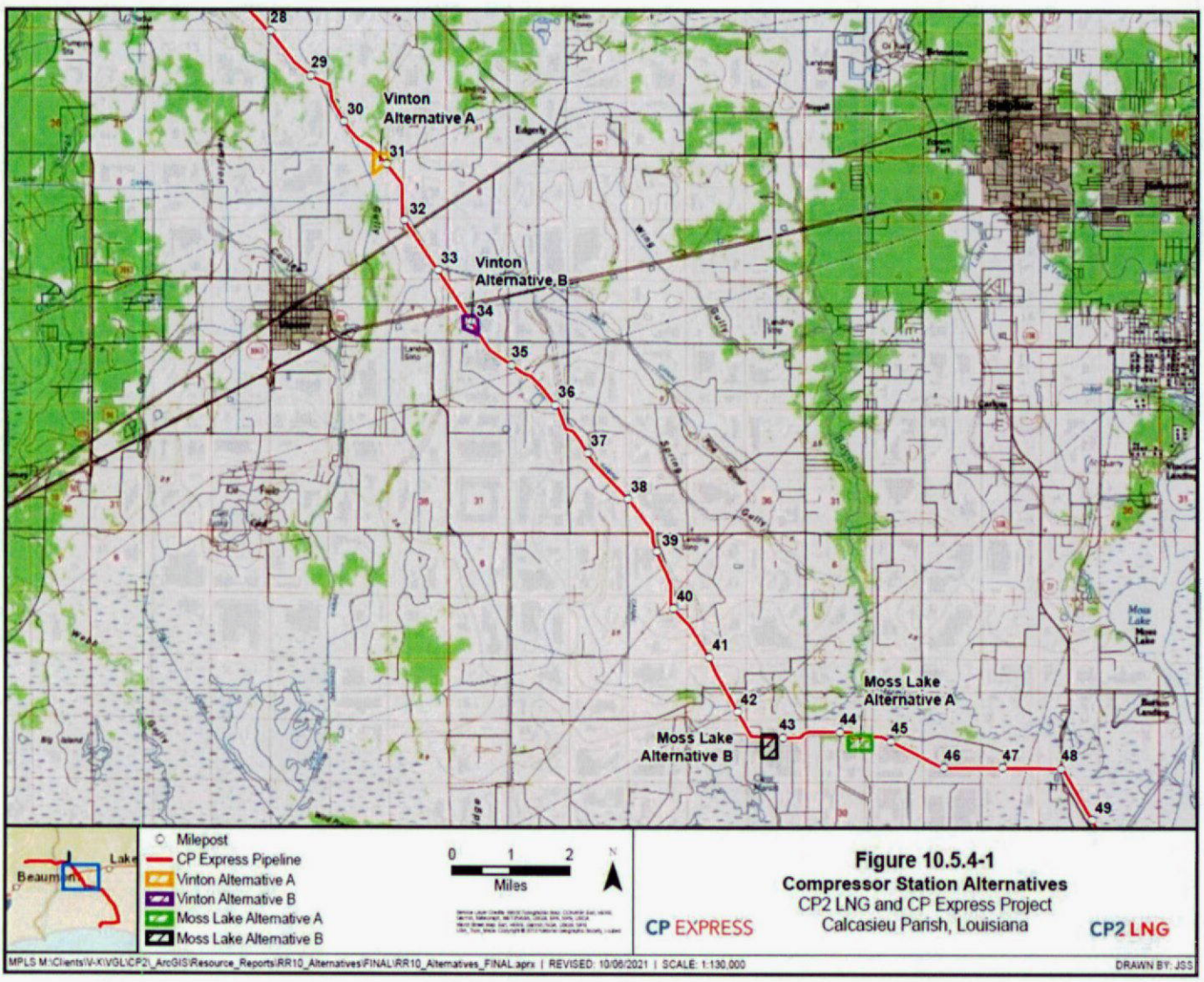
Table 5-3. Comparison of the Moss Lake Alternative A (Proposed Site) to Site Alternatives

Environmental Factor	Moss Lake Alternative A Site (Proposed Site)	Moss Lake Alternative B Site	Vinton Alternative A Site	Vinton Alternative B Site
Property size (acres)	60 [1]	60	37	41
Land use/vegetative cover	Pasture	Pasture	Pasture	Pasture
NWI mapped wetlands affected (acres)	0	0	0	0
Waterbodies permanently affected (feet)	0	0	667	0
Distance and direction to nearest residence	0.3 mile northwest	0.6 mile northeast	0.4 mile east	1.1 miles southwest
Length of electric distribution line (miles)	0	0.4	1.6	1.6
Length of access road (feet)	327	2,800	4,200	500
Environmental Justice communities affected	None	None	None	1

[1] The compressor station will affect 37.3 acres during operation.

[129] FERC Docket Number CP22-22-000, Resource Report 10, Accession Numbers 20211202-5104 and 20211202-5105.

Figure 5-2. Moss Lake Compressor Station Site Alternatives



5.4.1 Property Size Comparison

To accommodate the compressor station layout, CP Express determined that the site's footprint will need to be approximately 40 acres. The Vinton Alternative A and B sites each have smaller footprints than the Moss Lake Alternative A (proposed site) and B sites; therefore, the Moss Lake Alternative sites allow for more flexibility to avoid impacts and establish buffer. Additionally, the property boundaries of the Moss Lake Alternative sites are rectangular and allow for a more simplistic layout as opposed to the irregular property boundary of the Vinton Alternative sites.

5.4.2 Land Use/Vegetative Cover, NWI-Mapped Wetlands, and Waterbodies Comparison

All four sites have comparable land use/vegetative cover. Also, the evaluation showed that none of the construction footprints would affect NWI-mapped wetlands. Although the Moss Lake Alternative A site's property boundary contains NWI-mapped wetlands, the development of the 37.3 acres for the compressor station footprint will not impact the NWI-mapped wetlands.[130] Similarly, although there are mapped waterbodies within the property boundaries of the Moss Lake Alternative A and B sites, the development of the compressor station footprint would not affect any waterbodies. One drawback to the Vinton Alternative A site development is that it would affect approximately 667 feet of a waterbody in the northeast section of the site.

5.4.3 Nearest Residence, Electrical Distribution Line, and Access Road Comparison

All four sites are located in rural areas and are fairly distant from residential development (i.e., the closest residential development is approximately 0.3 miles northwest of the Moss Lake Alternative A site). With respect to proximity to existing electrical distribution lines, only the Moss Lake Alternative A site would be adjacent to an existing distribution line. All other alternatives would require construction of electric distribution lines ranging from 0.4 miles to 1.6 miles. For access roads, the Moss Lake Alternative A site is again most favorable as it would require the shortest access road (327 feet). The remaining alternatives would require access roads ranging in length from 500 feet to 4,200 feet.

5.4.4 Environmental Justice Comparison

Vinton Alternative B site is within a census block group that is classified as a low-income population (CBG 220190034001). The Moss Lake Alternative A and B sites are in an adjacent census block group to CBG 220190034001. The Vinton Alternative A site would not have any environmental justice impacts as there are no identified environmental justice communities within the analysis area.[131]

5.4.5 Summary

The Moss Lake Alternative B site is not available for long-term lease or purchase.[132] Based on the analysis of the alternative sites above, CP Express determined that the preferred site location was the proposed Moss Lake Compressor Station site (i.e., Moss Lake Alternative A site). CP Express contends that the selected Moss Lake Compressor Station site represents the most environmentally sound, technologically feasible, and economically viable development option.

5.5 Question 5

Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing non-environmental benefits?

Response:

No additional mitigating measures would offer more protection to the environment than the Moss Lake Compressor Station as proposed without unduly curtailing non-environmental benefits. Potential adverse

[130] FERC Docket Number CP22-22-000, Resource Report 10, Accession Numbers 20211202-5104 and 20211202-5105.
[131] Based on the population and demographic data availabe during the 2021 preliminary site alternatives analysis.
[132] FERC Docket Number CP22-22-000, Resource Report 10, Accession Numbers 20211202-5104 and 20211202-5105.

effects associated with the construction, operation, and maintenance of the Moss Lake Compressor Station will be mitigated to the extent practicable.

As discussed in the response to Question 1, and as detailed below, the Moss Lake Compressor Station will minimize or avoid adverse environmental impacts (e.g., air emissions, wastewater discharges, impacts to wetlands, and generation of solid and hazardous wastes) to the extent practicable. However, all air emissions and water discharges will be below any applicable ambient air and water quality standards. Additionally, the Moss Lake Compressor Station will minimize or avoid adverse impacts on wetlands, fish and wildlife resources, including endangered and threatened species, and prime agricultural areas to the extent practicable. CP Express will implement the necessary mitigation measures to further avoid or minimize these impacts.

The CAA will regulate air emissions from the Moss Lake Compressor Station, requiring the facility to obtain a Title V permit and PSD permit. The PSD air quality dispersion modeling analysis (see Appendix G to this application) demonstrates that the Moss Lake Compressor Station will not cause or contribute to a violation of any NAAQS or PSD increment standards. PSD requirements will be employed to control air emissions utilizing BACT, which are selected in a top-down process which requires use of any technically feasible technology unless it is not cost-effective or if it results in other adverse energy or environmental impacts (refer to Section 3 of this application). Further, the Moss Lake Compressor Station emission sources will be designed and operated to comply with the stringent NSPS and NESHAP standards, as applicable, promulgated by the U.S. EPA and applicable Louisiana regulations, including Louisiana Ambient Air Standards.

CP Express will not dispose of solid waste onsite; any industrial solid waste generated will be disposed off-site at a permitted disposal facility. Although some hazardous waste will be generated, CP Express will not own or operate any hazardous waste treatment, storage, or disposal units which require a permit per the Louisiana Hazardous Waste Regulations. Further, CP Express will properly recycle or dispose of all generated hazardous wastes off-site using permitted facilities and transporters qualified to handle such wastes.

Groundwater resources will be protected to the maximum extent possible through facility design, compliance with the SPCC Plan, and implementation of BMPs. The wastewater and stormwater discharges from the proposed Moss Lake Compressor Station will have minimal impact on receiving waters. Federal and state water quality regulations apply to industrial wastewater and require stringent treatment to specific standards prior to its discharge. The LDEQ will conduct evaluations to ensure discharges from the Moss Lake Compressor Station do not impair receiving streams. In addition, the LDEQ requires a discharge permit with numerical loading limitations for any industrial wastewater. CP Express discharges will comply with the LPDES program, and CP Express will utilize BMPs to limit the discharge of pollutants during/from any spills or release incidents.

CP Express completed wetland field delineations and documented the presence of wetlands within the Moss Lake Compressor Station property boundary and one roadside ditch crossed by the proposed driveway access. CP Express will mitigate unavoidable impacts on wetlands through the USACE and LDNR permitting processes, including appropriate compensatory mitigation for the permanent loss of wetlands. As part of the Joint Permit Application process, CP Express will submit a Compensatory Mitigation Plan. CP Express will coordinate with USACE and LDNR to determine the appropriate mitigation option. Additionally, CP Express will develop and implement protective measures in its Project-specific Plan and Procedures as well as other spill prevention measures to prevent or minimize the effects on adjacent wetlands.

CP Express is designing the Moss Lake Compressor Station to meet the requirements described above. In summary, the Moss Lake Compressor Station provides the most effective and reliable technology for utilizing gas turbine-driven compressors to transport natural gas via pipeline to the Terminal Facilities. The planned design and construction of the Moss Lake Compressor Station will be highly effective in providing environmental protection. CP Express believes there are no other mitigating measures that are feasible without unduly curtailing non-environmental benefits.

APPENDIX A. AREA MAP

N
KINDER MORGAN
METER STATION
PAR-CL-216.200
PAR-CL-206
MLV - 4
44
44.1
44.2
44.3
44.4
44.5
44.6
44.7
44.8
44.9
45
Moss Lake
Compressor
Station
Beaumont
Lak
Milepost
Valves
CP Express Pipeline
Access Road
Moss Lake
Compressor Station
Above Ground
Facilities
0
250
500
Feet
Service Layer Credits: Esri, HERE, Garmin, NGA, USGS, NPS
World Imagery: Maxar
Proposed Pipeline Route - Aerial Routing Sheets
CP Express Project
Calcasieu Parish, Louisiana
CP EXPRESS
CP2 LNG
MPLS M:\Clients\V-X\VGL\CP2_ArcGIS\Resource_Reports\RR01_Proj_Desc\Final\RR01_Proj_Desc_FINAL.aprx | REVISED: 10/20/2021 | SCALE: 1:6,000
DRAWN BY: JSS

APPENDIX B. EMISSION CALCULATIONS

Venture Global CP Express, LLC - Moss Lake Compressor Station
Aeroderivative Simple Cycle Combustion Turbines

Inputs

Property	Value	Units
Turbine Annual Operating Hours (SU/SD)[1]	54	hr/yr/turbine
Total Turbine Annual Operating Hours (Normal + SU/SD)	8,760	hr/yr/turbine
Number of Turbines	5	number
Average Heat Input Capacity (Duty) per turbine [2]	267.2	MMBtu/hr
Maximum Heat Input Capacity (Duty) per turbine [2]	293.9	MMBtu/hr
Fuel Gas Higher Heating Value (HHV)[1]	1,049	Btu/scf

[1] Based on data provided by Venture Global and includes all startup/shutdown activities per turbine per year.

[2] Average Heat Input Capacity (Duty) per turbine on vendor specification sheet provided by Venture Global. The value of 240.5 MMBtu/hr was based on low heating value; therefore, it was increased by 1.1 to conservatively estimate emissions. Maximum Heat Input Capacity (Duty) per turbine is based on a safety factor of 1.1.

Emissions Summary

Pollutant	Per Unit			
	Average Hourly Emission Rate[1]	Maximum Hourly Emission Rate[2]	Average Annual Emission Rate[3]	SU/SD Scenario Hourly Emission Rate[4]
	(lb/hr)	(lb/hr)	(tpy)	(lb/hr)
ROG (VOC)	5.30	5.83	23.22	5.83
NO_X	14.61	16.20	63.98	16.20
CO	21.92	24.10	96.03	24.10
SO_2	0.17	0.33	0.75	0.33
PM	4.58	5.03	20.06	5.03
PM_{10}	4.58	5.03	20.06	5.03
$PM_{2.5}$	4.58	5.03	20.06	5.03
CO_2e	-	-	144,568	-

[1] The average hourly emission rate is calculated as follows: Average Hourly Emission Rate (lb/hr) = Average Annual Emission Rate (tpy) x 2,000 (lb/ton) / 8,760 (hr/yr) per LDEQ guidance.

[2] Maximum of hourly emissions during normal operations and SU/SD operations.

[3] Annual average emissions include 54 hours per year of SU/SD activities for each turbine. For VOC, NOx, CO, and PM_{10}/$PM_{2.5}$, hourly emissions during SU/SD activities are higher than the average hourly emissions during normal operations. Therefore, annual average emissions during the 54 hours per year of SU/SD activities are based on the Max SU/SD Hourly Emissions shown in the table below.

[4] Maximum of emissions during SU/SD activities and emissions during normal operations is conservatively proposed for SU/SD Scenario Hourly Emission Rate.

Turbine Operations - Start-up/Shutdown Emissions

Activity	Duration/event[1], hrs
Start-up	0.20
Shutdown	0.13
Total SU/SD Hours Per Year[2]	**54**

[1] Based on "*CPX - Baker Hughes' PGT25+15ppm Predicted SU & SD Emissions*" memorandum.

[2] Based on data provided by Venture Global and includes all startup/shutdown activities per turbine per year.

Hourly Emissions [1], lb/hr

Per GT	NOx	CO	VOC	SO_2[2]	PM_{10} / $PM_{2.5}$
Start-up	8.70	12.6	3.00	0.20	2.10
Shutdown	7.50	9.6	2.70	0.13	1.50
SU/SD Hourly Emissions	**16.20**	**22.2**	**5.70**	**0.33**	**3.60**
Normal Ops. Hourly Emissions	**16.06**	**24.10**	**5.83**	**0.33**	**5.03**
Max SU/SD Hourly Emissions[3]	**16.20**	**24.10**	**5.83**	**0.33**	**5.03**

[1] Based on "*CPX - Baker Hughes' PGT25+15ppm Predicted SU & SD Emissions*" memorandum. The worst-case emission scenario is three startup and three shutdown events occurring within any given hour. Therefore, Venture Global conservatively estimated hourly emissions based on three start-up and three shutdown events occurring in any given hour.

[2] SO_2 emissions are based on 7 ppm fuel sulfur content.

[3] Maximum of SU/SD Hourly Emissions during SU/SD operations and Normal Operations. Hourly Emissions are conservatively proposed for Max SU/SD Scenario Hourly Emissions.

Venture Global CP Express, LLC - Moss Lake Compressor Station
Aeroderivative Simple Cycle Combustion Turbines

Total Startup/Shutdown Emissions [1], tons/yr

Per GT	NOx	CO	VOC	SO_2	PM_{10} / $PM_{2.5}$
Startup/Shutdown Emissions	0.44	0.65	0.16	0.01	0.14

[1] Based on the start-up/shutdown maximum hourly emission rates, as shown below:

Startup/Shutdown Emissions, tpy = Max SU/SD Hourly Emissions (lb/hr) * Total SU/SD Hours Per Year (hr/yr) * (1 ton / 2,000 lb).

NOx, tpy = 16.2 (lb/hr) * 54 (hr/yr) * (1 ton / 2,000 lb) = 0.44 tons/yr

Turbine Operations - Assume normal operation at 100% load.

Pollutant	Emission Factors			Avg Hourly	Max Hourly	Annual
	ppmv[1]	lb/MMBtu[2]	lb/MMscf[3]	lbs/hr[5]	lbs/hr[4,5]	ton/yr
ROG (VOC)	15.2	0.0198	20.804	5.30	5.83	23.20
NO_x	14.6	0.0546	57.319	14.60	16.06	63.93
CO	36	0.0820	86.041	21.91	24.10	95.97
SO_2	-	-	-	0.17	0.33	0.75
$PM_{10}/PM_{2.5}$[1]	-	0.0171	17.974	4.58	5.03	20.05
H_2S[9]	-	-	-	0.002	0.003	0.01
CO_2[6]	-	-	-	-	-	141,166
CH_4[6]	-	-	-	-	-	133
N_2O[7]	-	-	-	-	-	0.26
CO_2e[8]	-	-	-	-	-	144,568

[1] Based on vendor specification sheet provided by Venture Global.

[2] lb/MMBtu = ppmv/10^6 * Oxygen Correction Factor ((20.9) / (20.9 - 15)) * MW (lb/lbmole) * Fd (dscf/MMBtu) / Vm (dscf/lbmole).

[3] lb/MMscf = lb/MMBtu * Btu/scf

[4] Emissions are based on a safety factor of 1.1.

[5] Combustion of fuel with a sulfur content no greater than 4 ppmv (average) and 7 ppmv (maximum) inlet concentrations.

[6] Based on Heat and Material Balance provided by Venture Global.

[7] Based on N_2O emission factor obtained from 40 CFR 98 Subpart C Table C-2 for natural gas.

[8] Global warming potentials obtained from 40 CFR 98 Subpart A Table A-1. CO_2e emissions based on GWPs for each greenhouse gas pollutant.

[9] Assumed 99% of sulfur compounds in fuel are converted to SO_2 and the remaining 1% of sulfur compounds are a combination of mercaptan and H_2S. Since mercaptan is not a HAP/TAP, the emission calculations conservatively represent the remaining 1% of sulfur compounds as H_2S.

Venture Global CP Express, LLC - Moss Lake Compressor Station
Aeroderivative Simple Cycle Combustion Turbines

HAP Emissions from Turbine

Pollutant	Emission Factor		Adjusted Emission Factor	Per Turbine[6]		
				Avg Hourly Emissions[2]	Max Hourly Emissions[3]	Annual Emissions[4]
	ppmv	(lb/MMBtu)[1]	(lb/MMBtu)[5]	(lb/hr)	(lb/hr)	(tpy)
Acetaldehyde	-	4.000E-05	4.115E-05	0.01	0.01	0.05
Acrolein	-	6.400E-06	6.583E-06	0.002	0.002	0.008
Benzene	-	1.200E-05	1.234E-05	0.003	0.004	0.01
Ethylbenzene	-	3.200E-05	3.292E-05	0.01	0.01	0.04
Formaldehyde	-	7.100E-04	7.304E-04	0.20	0.21	0.85
Hexane[7]	-	-	-	0.01	0.02	0.04
Naphthalene	-	1.300E-06	1.337E-06	< 0.001	< 0.001	<0.01
PAH	-	2.200E-06	2.263E-06	0.001	0.001	0.003
Propylene Oxide	-	2.900E-05	2.983E-05	0.01	0.01	0.03
Toluene	-	1.300E-04	1.337E-04	0.04	0.04	0.16
Xylenes	-	6.400E-05	6.583E-05	0.02	0.02	0.08

[1] Emission factors obtained from U.S. EPA, AP-42, Section 3.1 Stationary Gas Turbines (4/00), Table 3.1-3

[2] Avg Hourly emissions = Adjusted Emission Factor (lb/MMBtu) * Average Heat Input Capacity (Duty) per turbine

[3] Max Hourly emissions = Adjusted Emission Factor (lb/MMBtu) * Maximum Heat Input Capacity (Duty) per turbine

[4] Maximum Potential Annual Emission Rate (tpy) = Hourly Emissions (lb/hr) * Total Turbine Annual Operating Hours (Normal + SU/SD) (hr/yr) * (1 ton / 2,000 lb)

[5] U.S. EPA AP-42 Emission factors adjusted to Fuel Gas HHV by multiplying by (Fuel Gas HHV/Natural Gas HHV).

[6] Consistent with LDEQ guidance, only those individual TAP/HAP with a potential to emit of equal to or greater than 1 lb/yr are included.

[7] Based on Heat and Material Balance provided by Venture Global.

Venture Global CP Express, LLC - Moss Lake Compressor Station
Emergency Essential Diesel Generators

Input Data [1]

Emergency Essential Generators:	Power Generation
Default HHV of Distillate Fuel Oil No.2[2], MMBtu/gal	0.138
Number of Units	5
Power Rating (KW)	1,000
Power Rating (hp)	1,341
Fuel consumption (gal/hr)	72
AP-42 Engine Size	Large
Tier 2/3 Engine Size	Large
Expected hours of operation	100

[1] Based on data provided by Venture Global.
[2] Based on 40 CFR 98 Subpart C, Table C-1 - Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel.

Fuel Gas External Combustion Greenhouse Gas Emission Factors

Units	CO_2[1]	CH_4[2]	N_2O[2]
kg/MMBtu	73.96	3.00E-03	6.00E-04
Global Warming Potential (GWP) [3]	1	25	298
lb/MMBtu	163	6.60E-03	1.32E-03

[1] CO_2 emission factor from 40 CFR 98 Subpart C Table C-1 for Distillate Fuel Oil No. 2.
[2] CH_4 and N_2O emission factors from 40 CFR 98 Subpart C, Table C-2 for Petroleum (all fuel types).
[3] CO_2e is calculated as follows: $CO_2e = CO_2 * GWP_{CO2} + CH_4 * GWP_{CH4} + N_2O * GWP_{N2O}$.

Emission Calculations - Per Unit

Pollutant[4]	Emission Factors[1]		Emission Factor Basis	Emissions	
	Large Tier 2 and Large AP-42 Engines [3]	Units		Potential Hourly Emissions (lb/hr)	Potential Annual Emissions (tpy)
PM	0.20	g/KW-hr	Tier 2/3 Standard Requirement[2]	0.44	0.02
PM_{10}	0.20	g/KW-hr	Tier 2/3 Standard Requirement[2]	0.44	0.02
$PM_{2.5}$	0.20	g/KW-hr	Tier 2/3 Standard Requirement[2]	0.44	0.02
SO_2	0.00001	lb/gal diesel	Fuel sulfur content of 15 ppm	0.001	< 0.01
NO_x	6.40	g/KW-hr	Tier 2/3 Standard Requirement[2]	14.11	0.71
VOC	6.40	g/KW-hr	Tier 2/3 Standard Requirement[2]	14.11	0.71
CO	3.5	g/KW-hr	Tier 2/3 Standard Requirement[2]	7.72	0.39
CO_2	23	lb/gal	EPA - 40 CFR 98 Table C-1	-	81
CH_4	9.11E-04	lb/gal	EPA - 40 CFR 98 Table C-2	-	< 0.01
N_2O	1.82E-04	lb/gal	EPA - 40 CFR 98 Table C-2	-	< 0.01
CO_2e[5]	23	lb/gal	calculated	-	81

[1] Large engines are considered greater than 560 kW for Tier 2 emission factor basis and greater than 600 hp for AP-42 emission factor basis. SO_2 emissions are based on a maximum fuel sulfur content of 15 ppm.
[2] For emergency, standby power generation Tier 2/3 standards are promulgated by 40 CFR 89.112 Table 1.
[3] Emission factors for PM, NO_x, and CO for Tier 2 large engines are based on requirements for Tier 2 engines as specified in NSPS Subpart IIII for new engines with a displacement less than 10 Liters per cylinder. NSPS Subpart IIII specifies to use emission factors from 40 CFR Part 89 for non-road engines.
[4] Individual TAP/HAP are less than 1 lb/yr. Therefore, consistent with LDEQ guidance, TAP/HAP are not included.
[5] CO_2e is calculated as follows: $CO_2e = CO_2 * GWP_{CO2} + CH_4 * GWP_{CH4} + N_2O * GWP_{N2O}$.

Company	Facility	
Venture Global CP Express, LLC	Moss Lake Compressor Station	
Descriptive Name of Emission Point	**TEMPO Subject Item ID**	**Emission Point ID No.**
Condensate Storage Tank No. 1	New	TK01

Operating Data	
Tank Working Volume	4,324.15 gal
Operating Rate[1]	8,648.30 gal/yr
Hours of Operation	8,760.00 hrs/year

Pollutant	Emission Factor	Reference	Emission Rates[5]			
			Avg (lb/hr)	Max (lb/hr)	Annual (lb/yr)	Annual (tons/yr)
VOC[2]	NA	BREEZE TankESP PRO Version 5.2.0	0.03	0.03	249.67	0.12
VOC[3]	NA	Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method	0.09	0.09	800.00	0.40
		Total VOC Emissions[4]:	**0.12**	**0.12**	**1,049.67**	**0.52**

[1] Operating rate based on two condensate tank turnovers per year.

[2] Working and breathing emissions are calculated utilizing the BREEZE TankESP PRO Version 5.2.0 program.

[3] Emissions include flash emissions from condensate.

[4] Total VOC emissions include tank working losses, tank breathing losses, and condensate flashing losses.

[5] Individual TAP/HAP are less than 1 lb/yr. Therefore, consistent with LDEQ guidance, TAP/HAP are not included.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
TK01

Identification

User Identification:	TK01
City:	Lake Charles
State:	LA
Company:	Venture Global CP Express, LLC
Type of Tank:	FRT (no floating roof)
Description:	Moss Lake Compressor Station

Tank Dimensions

Shell Height (ft):	12.00
Diameter (ft):	8.00
Liquid Height (ft) :	11.00
Avg. Liquid Height (ft):	6.00
Volume (gallons):	4,512.13
Turnovers:	2.29
Net Throughput(gal/yr):	8,648.30
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	Black Paint
Shell Condition	New
Roof Color/Shade:	Black Paint
Roof Condition:	New

Roof Characteristics

Type:	Column-Supported (Cone)
Height (ft)	0.25
Roof Slope (ft/ft)	

Breather Vent Settings

Vacuum Settings (psig):	
Pressure Settings (psig):	

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
Emissions Report - Detail Format
Liquid Contents of Storage Tank

TK01 - Vertical Fixed Roof Tank
Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F) Avg.	Min.	Max.	Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight.	Basis for Vapor Pressure Calculations
Condensate	All	76.58	67.35	85.81	72.90	3.64	3.64	3.64	89.94			89.94	N/A
Benzene									78.11	0.0008	0.0004	78.11	Option 2: A=6.906, B=1211, C=220.79
Ethylbenzene									106.17	0.0000	0.0000	106.17	Option 2: A=6.95, B=1419.3, C=212.61
Toluene									92.14	0.0009	0.0001	92.14	Option 2: A=7.017, B=1377.6, C=222.64
Xylene									106.17	0.0001	0.0000	106.17	Option 2: A=7.009, B=1462.3, C=215.11

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)
TK01 - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb):	184.5273
Vapor Space Volume (cu ft):	305.7817
Vapor Density (lb/cu ft):	0.0569
Vapor Space Expansion Factor:	
Vented Vapor Saturation Factor:	
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	305.7817
Tank Diameter (ft):	8.0000
Vapor Space Outage (ft):	6.0833
Tank Shell Height (ft):	12.0000
Average Liquid Height (ft):	6.0000
Roof Outage (ft):	0.0833
Roof Outage (Cone Roof)	
Roof Outage (ft):	0.0833
Roof Height (ft)	0.2500
Roof Slope (ft/ft)	
Shell Radius (ft):	4.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0569
Vapor Molecular Weight (lb/lb-mole):	89.9440
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	3.6400
Daily Avg. Liquid Surface Temp. (deg. F):	76.5802
Daily Average Ambient Temp. (deg. F):	68.7004
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.7310
Liquid Bulk Temperature (deg. F):	72.9029
Tank Paint Solar Absorptance (Shell):	0.9700
Tank Paint Solar Absorptance (Roof):	0.9700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,444.1770
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	
Daily Vapor Temperature Range (deg. R):	36.9258
Daily Vapor Pressure Range (psia):	0.0000
Breather Vent Press. Setting Range (psia):	
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	3.6400
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	3.6400
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	3.6400
Daily Avg. Liquid Surface Temp. (deg F):	76.5802
Daily Min. Liquid Surface Temp. (deg F):	67.3487
Daily Max. Liquid Surface Temp. (deg F):	85.8116
Daily Ambient Temp. Range (deg. R):	17.8512
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	3.6400
Vapor Space Outage (ft):	6.0833
Working Losses (lb):	65.1433
Vapor Molecular Weight (lb/lb-mole):	89.9440
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	3.6400
Annual Net Throughput (gal/yr.):	8,648.2998
Annual Turnovers:	2.2937
Turnover Factor:	
Maximum Liquid Volume (gal):	4,512.1313
Maximum Liquid Height (ft):	11.0000
Tank Diameter (ft):	8.0000
Working Loss Product Factor:	
Total Losses (lb):	249.6706

TankESP
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual
TK01 - Vertical Fixed Roof Tank
Lake Charles, LA

	Losses(lbs)		
Components	Working loss	Breathing Loss	Total Emissions
Condensate	65.14	184.53	249.67
Unidentified Components	65.11	184.42	249.53
Benzene	0.03	0.08	0.10
Ethylbenzene	0.00	0.00	0.00
Toluene	0.01	0.02	0.03
Xylene	0.00	0.00	0.00

Company	Facility	
Venture Global CP Express, LLC	Moss Lake Compressor Station	
Descriptive Name of Emission Point	**TEMPO Subject Item ID**	**Emission Point ID No.**
Condensate Storage Tank No. 1	New	TK01

Volatile Organic Compound Emission Calculation for Flashing of Condensate

Vasquez-Beggs Solution Oil/Gas Ratio Correlation Method

CASE: Moss Lake Compressor Station

CASE INPUTS:[1]

Stock Tank API Gravity	59.0	API
Separator Pressure (psig)	850.00	P_i
Separator Temperature (F)	80.00	T_i
Separator Gas Gravity	0.74	SG_i
Barrels of Oil Per Day (BOPD)	0.56	Q
Stock Tank Gas Molecular Weight	89.94	MW
Wt. Fraction VOC (C_3+) of Stock Tank Gas	0.024	VOC
Atmospheric Pressure (psia)	14.70	P_{atm}

[1] Based on the natural gas liquids speciation data provided by Venture Global.

Methodology Constraints

16 >API< 58	API
50 > P_i < 5250	psia
70 > T_i < 295	F
0.56 > SG_i < 1.18	28.97/MW
None > Q < None	BOPD
18 > MW < 125	lb/lb-mol
0.5 > VOC < 1.00	Fraction

$$R_s = (C_1 \times SG_x \times (P_i^{C2})) \times \exp((C_3 \times API)/(T_i + 460))$$

Where:

R_s = Gas/Oil Ratio of liquid at pressure of interest
SG_x = Dissolved gas gravity at 100 psig
P_i = Pressure at initial condition (psia)
API = API Gravity of liquid hydrocarbon at final condition
T_i = Temperature of initial condition (F)

Constants		API Gravity < 30	API Gravity > 30
C_1	=	0.0362	0.0178
C_2	=	1.0937	1.187
C_3	=	25.724	23.931

For SG_x = Dissolved gas gravity at 100 psig

= SG_i [1.0 + 0.00005912 x API x T_i x log(P_i/114.7)]

SG_i = Gas Gravity at initial condition

SG_x =	0.9246
C_1 =	0.0178
C_2 =	1.187
C_3 =	23.931

R_s = 688.65 scf/bbl for Pi + Patm = 864.70

$$THC = R_s \times Q \times MW \times 1/385 \text{ scf/lb-mol} \times 365 \text{ day/yr} \times 1 \text{ ton}/2000 \text{ lb}$$

THC = Total hydrocarbons (tons/year)
R_s = Solution Oil/Gas Ratio (scf/STB)
Q = Oil Production Rate (bbl/day)
MW = Molecular Weight of Stock Tank Gas (lb/lb-mol)
385 = Volume of 1 lb/lb-mol of gas at 14.7 psia and 68 F

THC = 16.56 tpy

$$VOC = THC \times Frac\ C_3+ \text{ in the Stock Tank Vapor}$$

VOC = 0.40 tpy From flashing of gas from seperator to tank pressure

Company	Facility	
Venture Global CP Express, LLC	Moss Lake Compressor Station	
Descriptive Name of Emission Point	**TEMPO Subject Item ID**	**Emission Point ID No.**
Fugitive Emissions	New	FUG01

Component Type	Count	Service Type	Factor[1] (kg/hr/comp)	Factor (lb/hr/comp)	Total (lbs/hr)	Total (tons/yr)	VOC (wt%)	VOC (tons/yr)	Benzene[3] (tons/yr)	Hexane[3] (tons/yr)	Hydrogen Sulfide[3] (tons/yr)	Toluene[3] (tons/yr)	o-Xylene[3] (tons/yr)	Methane[3] (tons/yr)	Carbon Dioxide[3] (tons/yr)	CO_2e[4] (tons/yr)
VALVE	3,144	Gas	4.50E-03	9.92E-03	31.19	136.62	2.36%	3.22	0.02	0.06	0.001	0.01	0.006	121.97	4.22	3,053
FLANGE	4,849	Gas	3.90E-04	8.60E-04	4.17	18.26	2.36%	0.43	0.003	0.01	0.0001	0.001	0.001	16.30	0.56	408
RELIEF VALVE	45	Gas	8.80E-03	1.94E-02	0.87	3.82	2.36%	0.09	0.001	0.00	0.00002	0.0003	0.0002	3.41	0.12	85
COMPRESSOR SEAL	14	Gas	8.80E-03	1.94E-02	0.27	1.19	2.36%	0.03	0.0002	0.001	0.00001	0.0001	0.0001	1.06	0.04	27
VALVE	31	Water / Light Oil	9.80E-05	2.16E-04	0.01	0.03	100.00%	0.03	-	-	-	-	-	-	-	-
PUMPS	18	Water / Light Oil	2.40E-05	5.29E-05	9.52E-04	0.004	100.00%	0.004	-	-	-	-	-	-	-	-
FLANGES/CONNECTORS[2]	182	Water / Light Oil	1.10E-04	2.43E-04	0.04	0.19	100.00%	0.19	-	-	-	-	-	-	-	-
RELIEF VALVES	7	Water / Light Oil	1.40E-02	3.09E-02	0.22	0.95	100.00%	0.95	-	-	-	-	-	-	-	-
OPEN-ENDED LINES	4	Water / Light Oil	2.50E-04	5.51E-04	2.20E-03	0.010	100.00%	0.010	-	-	-	-	-	-	-	-
VALVES	711	Light Oil	2.50E-03	5.51E-03	3.92	17.16	100.00%	17.16	-	-	-	-	-	-	-	-
FLANGES/CONNECTORS[2]	989	Light Oil	2.10E-04	4.63E-04	0.46	2.01	100.00%	2.01	-	-	-	-	-	-	-	-
RELIEF VALVES	7	Light Oil	7.50E-03	1.65E-02	0.12	0.51	100.00%	0.51	-	-	-	-	-	-	-	-
OPEN-ENDED LINES	4	Light Oil	1.40E-03	3.09E-03	0.01	0.05	100.00%	0.05	-	-	-	-	-	-	-	-
				Component Total	41.28	180.80		24.69	0.02	0.07	< 0.01	0.01	0.01	143	5.00	3,573

[1] Emission Factors are obtained from EPA-453/R-95-017, Protocol for Equipment Leak Emission Estimates, Table 2-4, (11/95).

[2] Breakout of flanges/connectors was not available; therefore, the most conservative factor was utilized.

[3] Benzene (0.58% wt), Hexane (1.82% wt), Hydrogen Sulfide (0.0006% wt), Toluene (0.34% wt), o-Xylene (0.18% wt), Methane (89.27% wt), and Carbon Dioxide (3.09% wt) contents in Natural Gas are based on Pipeline Quality Natural Gas provided by Venture Global.

[4] Global warming potentials for Methane and Carbon Dioxide are 25 and 1, respectively.

Example CO_2e Calculation:

(Valve Total Tons/yr)(wt% CH_4)(global warming potential for CH_4) + (Valve Total Tons/yr)(wt% CO_2)(global warming potential for CO_2) = Tons/yr CO_2e

= (136.62 Total Tons/yr)(87.84 wt% CH_4)(25) + (136.62 Total Tons/yr)(5.08 wt% CO_2)(1) = 3,053 Tons/yr CO_2e

APPENDIX C. INSIGNIFICANT ACTIVITIES AND GC XVII ACTIVITIES

GC XVII Activities

Company	Facility	
Venture Global CP Express, LLC	Moss Lake Compressor Station	
Descriptive Name of Emission Point	**TEMPO Subject Item ID**	**Emission Point ID No.**
Miscellaneous Venting from Filter Separators	N/A (GCXVII Activity)	MISCVENT

	Total Venting Volumes from All Filter Separators Per Event[1]	Number of Events Per Year[1]	Number of Filter Separators[1]
Miscellaneous Venting from Filter Separators	277 lb-mol	20	10

Gas Speciation

Pollutant	Mol Fraction[2]	MW (lb/lb-mol)
Benzene	0.000030	78.110
Propane	0.003024	44.100
N-butane	0.001008	58.120
Iso butane	0.001008	58.120
Ethane	0.025203	30.070
N-pentane	0.000807	72.150
Nitrogen	0.005000	28.013
Iso pentane	0.000807	72.150
Neopentane	0.000012	72.150
n-Hexane	0.000085	86.180
Hydrogen Sulfide	0.000003	34.080
Mercaptan	0.000001	48.110
Methane	0.950624	16.040
Carbon Dioxide	0.012000	44.010
Toluene	0.000015	92.140
Water	0.000148	18.010
Cyclopentane	0.000010	70.130
Cyclohexane	0.000014	84.160
n-Heptane	0.000091	100.210
n-Octane	0.000062	114.230
n-Nonane	0.000032	128.250
n-Decane	0.000009	142.280
o-Xylene	0.000007	106.160

Company	Facility	
Venture Global CP Express, LLC	Moss Lake Compressor Station	
Descriptive Name of Emission Point	**TEMPO Subject Item ID**	**Emission Point ID No.**
Miscellaneous Venting from Filter Separators	N/A (GCXVII Activity)	MISCVENT

Example Calculation:

lbs Hexane per event = Total Venting Volumes from All Filter Separators Per Event (lb-mol) x Mol Fraction of Hexane x MW of Hexane (lb/lb-mol)

lbs Hexane per event = (277 lb-mol) x (0.000085) x (86.180 lb/lb-mol) = 2.03 lbs

Emissions from Miscellaneous Venting

Pollutant[3]	Emissions Per Event (lbs)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	111.70	0.06	1.12
Benzene	0.65	0.0003	<0.01
n-Hexane	2.03	0.001	0.02
Propane	36.94	0.02	0.37
Toluene	0.38	0.0002	<0.01
o-Xylene	0.21	0.0001	<0.01
Methane	-	-	42
Carbon Dioxide	-	-	1
CO_2e	-	-	1,051

[1] Total venting volume from all filter separators per event, number of events per year, and number of filter separator are based on best available information and engineering estimates.

[2] Mol fractions for Pipeline Quality Natural Gas are provided by Venture Global.

[3] Per LDEQ guidance HAP/TAP emissions less than 1 lb/yr are not listed.

Company	Facility	
Venture Global CP Express, LLC	Moss Lake Compressor Station	
Descriptive Name of Emission Point	**TEMPO Subject Item ID**	**Emission Point ID No.**
Pipeline Pigging	N/A (GCXVII Activity)	PPLP

Pig Receiver[1]		
Length	7.00	feet
Diameter	3.50	feet
Number of Launchers/Receivers	8.00	4 Sets/Pipeline; 2 Pipelines
Volume of Launchers/Receivers	538.78	scf
Maintenance Schedule	6.00	release/lateral/year
Number of Laterals	2.00	
Volume of Natural Gas Release	6,465.40	scf/yr

Example Calculation:

lbs Methane per hour = Volumes of Natural Gas Release (scf/yr) x Composition of Methane (mol fraction) / 379.4 (scf/lbmol) x MW of Methane (lb/lb-mol) / 8,760 (hr/yr)

lbs Methane per hour = (6,465.40 scf/yr) x 95.0624% / (379.4 scf/lbmol) x (16.04 lb/lbmol) / (8,760 hrs/yr) = 0.03 lbs/hr

Fuel Gas Composition

Component	Molecular Weight (lb/lb-mol)	Composition (mol fraction)[2]	Volumetric Flow Rate (scf/yr)	Hourly Mass Flow Rate (lb/hr)	Annual Mass Flow Rate (tons/yr)
Benzene	78.11	0.000030	0.19	0.000005	0.00002
Propane	44.10	0.003024	19.55	0.0003	0.001
N-butane	58.12	0.001008	6.52	0.0001	0.0005
Iso butane	58.12	0.001008	6.52	0.0001	0.0005
Ethane	30.07	0.025203	162.95	0.001	0.01
N-pentane	72.15	0.000807	5.22	0.0001	0.0005
Nitrogen	28.01	0.005000	32.33	0.0003	0.001
Iso pentane	72.15	0.000807	5.22	0.0001	0.0005
Neopentane	72.15	0.000012	0.08	0.000002	0.00001
n-Hexane	86.18	0.000085	0.55	0.0000	0.0001
Hydrogen Sulfide	34.08	0.000003	0.02	0.0000002	0.000001
Mercaptan	48.11	0.000001	0.01	0.0000001	0.0000004
Methane	16.04	0.950624	6,146.16	0.03	0.13
Carbon Dioxide	44.01	0.012000	77.58	0.001	0.004
Toluene	92.14	0.000015	0.10	0.000003	0.00001
Water	18.01	0.000148	0.96	0.00001	0.00002
Cyclopentane	70.13	0.000010	0.06	0.000001	0.00001
Cyclohexane	84.16	0.000014	0.09	0.000002	0.00001
n-Heptane	100.21	0.000091	0.59	0.00002	0.00008
n-Octane	114.23	0.000062	0.40	0.00001	0.00006
n-Nonane	128.25	0.000032	0.21	0.00001	0.00003
n-Decane	142.28	0.000009	0.06	0.000002	0.00001
o-Xylene	106.16	0.000007	0.05	0.000001	0.00001

Company	Facility	
Venture Global CP Express, LLC	Moss Lake Compressor Station	
Descriptive Name of Emission Point	**TEMPO Subject Item ID**	**Emission Point ID No.**
Pipeline Pigging	N/A (GCXVII Activity)	PPLP

Emission Calculations Summary

Pollutant[3]	Hourly Emission Rate (lb/hr)	Annual Emission Rate (tpy)
VOC	0.001	< 0.01
Methane	-	0.13
Carbon Dioxide	-	0.004
CO_2e	-	3

Conversion Factors:	
length to diameter ratio	2
inch/feet	12
SCF/lb-mole (ideal gas)	379.4
gallon/ft^3	7.48
lb/ton	2,000

[1] Based on best available information and engineering estiamtes.

[2] Mol fractions for Pipeline Quality Natural Gas are provided by Venture Global.

[3] Individual TAP/HAP are less than 1 lb/yr. Therefore, consistent with LDEQ guidance, TAP/HAP are not included.

Venture Global CP Express, LLC - Moss Lake Compressor Station
Condensate Truck Loading - General Condition XVII Activity

Parameter		Unit
Saturation Factor[1]	0.60	
Temperature of bulk liquid loaded[2]	529.09	R
True Vapor Pressure of liquid loaded[3]	3.64	PSI
Molecular Weight of Vapor[3]	89.94	
Loading Loss Factor = 12.46*S*VP*MW/T		
Loading Loss Factor	4.63	lb/1000 gal
Tank Throughput[4]	8,648	gal/yr
Loading Losses (VOC Emissions)[5]	**0.005**	**lb/hr**
	0.02	**TPY**

[1] Saturation factor from AP-42 Fifth Edition, Table 5.2-1

[2] AP-42 Fifth Edition, Equation 1-31, Table 7.1-6. Paint Solar Absorptance, and Table 7.1-7. Meteorological Data (T_{AX}, T_{AN}, V, I, P_A) for Selected U.S. Locations (Meteorological data: Lake Charles, LA).

[3] Based on data provided by Venture Global.

[4] Based on condensate tank throughput.

[5] Individual TAP/HAP are less than 1 lb/yr. Therefore, consistent with LDEQ guidance, TAP/HAP are not included.

Company	Facility	
Venture Global CP Express, LLC	Moss Lake Compressor Station	
Descriptive Name of Emission Point	**TEMPO Subject Item ID**	**Emission Point ID No.**
Station Suction and Discharge Blowdowns	N/A (GCXVII Activity)	SSDB

	Blowdown Volumes (lb-mol)[1]	Number of Events Per Year[2]	Number of Events Per Hour[3]
Station Suction Blowdown Stacks	5,707	1	1
Station Discharge Blowdown Stack	6,904	1	1

Pollutant	Mol Fraction[4]	MW (lb/lb-mol)
Benzene	0.000030	78.110
Propane	0.003024	44.100
N-butane	0.001008	58.120
Iso butane	0.001008	58.120
Ethane	0.025203	30.070
N-pentane	0.000807	72.150
Nitrogen	0.005000	28.013
Iso pentane	0.000807	72.150
Neopentane	0.000012	72.150
n-Hexane	0.000085	86.180
Hydrogen Sulfide	0.000003	34.080
Mercaptan	0.000001	48.110
Methane	0.950624	16.040
Carbon Dioxide	0.012000	44.010
Toluene	0.000015	92.140
Water	0.000148	18.010
Cyclopentane	0.000010	70.130
Cyclohexane	0.000014	84.160
n-Heptane	0.000091	100.210
n-Octane	0.000062	114.230
n-Nonane	0.000032	128.250
n-Decane	0.000009	142.280
o-Xylene	0.000007	106.160

Example Calculation:

lbs Hexane per event = Blowdown Volume (lb-mol) x Mol Fraction of Hexane x MW of Hexane (lb/lb-mol)

lbs Hexane for Station Suction Blowdown Stack 1 per event = (6,904 lb-mol) x (0.000085) x (86.180 lb/lb-mol) = 50.58 lbs

Station Suction Blowdown Stack 1

Pollutant	Average Hourly Emissions (lb/hr)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	2,300.72	1.15	1.15
Benzene	13.37	0.007	0.01
n-Hexane	41.80	0.02	0.02
Hydrogen Sulfide	0.58	0.0003	0.0003
Toluene	7.89	0.004	0.004
o-Xylene	4.24	0.002	0.002
Methane	-	43.51	44
Carbon Dioxide	-	1.51	2
CO_2e	-	-	1,102

Company	Facility	
Venture Global CP Express, LLC	Moss Lake Compressor Station	
Descriptive Name of Emission Point	**TEMPO Subject Item ID**	**Emission Point ID No.**
Station Suction and Discharge Blowdowns	N/A (GCXVII Activity)	SSDB

Station Suction Blowdown Stack 2

Pollutant	Average Hourly Emissions (lb/hr)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	2,300.72	1.15	1.15
Benzene	13.37	0.007	0.01
n-Hexane	41.80	0.02	0.02
Hydrogen Sulfide	0.58	0.0003	0.0003
Toluene	7.89	0.004	0.004
o-Xylene	4.24	0.002	0.002
Methane	-	43.51	44
Carbon Dioxide	-	1.51	2
CO_2e	-	-	1,102

Station Discharge Blowdown

Pollutant	Average Hourly Emissions (lb/hr)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	2,783.55	1.39	1.39
Benzene	16.18	0.008	0.01
n-Hexane	50.58	0.03	0.03
Hydrogen Sulfide	0.71	0.0004	0.000
Toluene	9.54	0.005	0.00
o-Xylene	5.13	0.003	0.003
Methane	-	52.64	53
Carbon Dioxide	-	1.82	2
CO_2e	-	-	1,327

Emissions Summary

Pollutant	Average Hourly Emissions (lb/hr)	Emissions Per Event (tons)	Total Emissions (TPY)
VOC	7,384.98	3.69	3.69
Benzene	42.92	0.02	0.02
n-Hexane	134.19	0.07	0.07
Hydrogen Sulfide	1.87	0.001	<0.01
Toluene	25.32	0.01	0.01
o-Xylene	13.61	0.007	0.01
Methane	-	139.66	141
Carbon Dioxide	-	4.84	6.00
CO_2e	-	-	3,531

[1] Based on best available information and engineering estimates.

[2] Based on 2 blowdowns per stack.

[3] Blowdown occurs in a matter of minutes. Assumes only one blowdown per hour.

[4] Mol fractions for Pipeline Quality Natural Gas are provided by Venture Global.

Insignificant Activities

LAC 33:III.501.B.5.A.3

Venture Global CP Express, LLC
LAC 33:III.501.B.5.A.3 - Emergency Generator Diesel Storage Tanks

Tank Description	No. of Tanks[1]	Tank Working Volume[1] (gal)	Operating Rate[1] (gal/yr)
Emergency Generator Diesel Storage Tanks	5	3,050	12,200

VOC Emissions[2,3]

Tank Description	Emissions Per Tank	Total VOC Emissions
	(tpy)	
Emergency Generator Diesel Storage Tanks	0.001	0.01
Total	**0.001**	**0.01**

[1] Provided by Venture Global. Operating Rate is based on 4 turnovers per year per tank.

[2] The emissions are calculated based on BREEZE TankESP PRO Version 5.2.0.

[3] Emissions include working and breathing losses.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
Emergency Generator Diesel Tank

Identification

User Identification:	Emergency Generator Diesel Tank
City:	Lake Charles
State:	LA
Company:	Venture Global CP Express, LLC
Type of Tank:	FRT (no floating roof)
Description:	Moss Lake Compressor Station

Tank Dimensions

Shell Height (ft):	12.00
Diameter (ft):	8.00
Liquid Height (ft) :	11.00
Avg. Liquid Height (ft):	6.00
Volume (gallons):	4,512.13
Turnovers:	3.24
Net Throughput(gal/yr):	12,200.00
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	Black Paint
Shell Condition	New
Roof Color/Shade:	Black Paint
Roof Condition:	New

Roof Characteristics

Type:	Column-Supported (Cone)
Height (ft)	0.25
Roof Slope (ft/ft)	

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
Emissions Report - Detail Format
Liquid Contents of Storage Tank

Emergency Generator Diesel Tank - Vertical Fixed Roof Tank
Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight.	Basis for Vapor Pressure Calculations
Diesel	All	76.58	67.35	85.81	72.90	0.0110	0.0082	0.0146	130.00			188.00	Option 3: A=12.101, B=8907
Benzene									78.11	8.00E-06	1.92E-03	78.11	Option 2: A=6.906, B=1211, C=220.79
Benzo(g,h,i)perylene									276.33	9.00E-06	1.24E-15	276.33	Option 2: A=11.82, B=6580, C=273.15
Cumene {isopropylbenzene}									120.19	0.00E+00	0.00E+00	120.19	Option 2: A=6.929, B=1455.8, C=207.2
Cyclohexane									84.16	0.00E+00	0.00E+00	84.16	Option 2: A=6.845, B=1203.5, C=222.86
Ethylbenzene									106.17	1.30E-04	3.09E-03	106.17	Option 2: A=6.95, B=1419.3, C=212.61
Hexane (n-)									86.18	1.00E-06	3.81E-04	86.18	Option 2: A=6.878, B=1171.5, C=224.37
Iso-octane {2,2,4 trimethylpentane}									114.23	0.00E+00	0.00E+00	114.23	Option 2: A=6.812, B=1257.8, C=220.74
Naphthalene									128.17	7.60E-04	4.90E-04	128.17	Option 2: A=7.146, B=1831.6, C=211.82
PACs {Chrysene}									228.29	2.30E-05	2.57E-13	228.29	Option 2: A=12.32, B=6160, C=273.15
Toluene									92.14	3.20E-04	2.28E-02	92.14	Option 2: A=7.017, B=1377.6, C=222.64
Trimethylbenzene (1,2,4)									120.19	1.00E-02	5.08E-02	120.19	Option 2: A=7.044, B=1573.3, C=208.56
Xylene									106.17	2.90E-03	6.03E-02	106.17	Option 2: A=7.009, B=1462.3, C=215.11

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

Emergency Generator Diesel Tank - Vertical Fixed Roof Tank
Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb):	1.7966
Vapor Space Volume (cu ft):	305.7817
Vapor Density (lb/cu ft):	0.0002
Vapor Space Expansion Factor:	
Vented Vapor Saturation Factor:	
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	305.7817
Tank Diameter (ft):	8.0000
Vapor Space Outage (ft):	6.0833
Tank Shell Height (ft):	12.0000
Average Liquid Height (ft):	6.0000
Roof Outage (ft):	0.0833
Roof Outage (Cone Roof)	
Roof Outage (ft):	0.0833
Roof Height (ft)	0.2500
Roof Slope (ft/ft)	
Shell Radius (ft):	4.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0002
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0110
Daily Avg. Liquid Surface Temp. (deg. F):	76.5802
Daily Average Ambient Temp. (deg. F):	68.7004
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.7310
Liquid Bulk Temperature (deg. F):	72.9029
Tank Paint Solar Absorptance (Shell):	0.9700
Tank Paint Solar Absorptance (Roof):	0.9700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,444.1770
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	
Daily Vapor Temperature Range (deg. R):	36.9258
Daily Vapor Pressure Range (psia):	0.0064
Breather Vent Press. Setting Range (psia):	
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0110
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0082
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0146
Daily Avg. Liquid Surface Temp. (deg F):	76.5802
Daily Min. Liquid Surface Temp. (deg F):	67.3487
Daily Max. Liquid Surface Temp. (deg F):	85.8116
Daily Ambient Temp. Range (deg. R):	17.8512
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0110
Vapor Space Outage (ft):	6.0833

Working Losses (lb):	0.4021
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0110
Annual Net Throughput (gal/yr.):	12,200.0000
Annual Turnovers:	3.2357
Turnover Factor:	
Maximum Liquid Volume (gal):	4,512.1313
Maximum Liquid Height (ft):	11.0000
Tank Diameter (ft):	8.0000
Working Loss Product Factor:	
Vapor Control Efficiency (%)	0%
Total Losses (lb):	2.1986

TankESP
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual
Emergency Generator Diesel Tank - Vertical Fixed Roof Tank
Lake Charles, LA

	Losses(lbs)		
Components	Working loss	Breathing Loss	Total Emissions
Diesel	4.02E-01	1.80E+00	2.20E+00
Unidentified Components	3.46E-01	1.55E+00	1.89E+00
Benzene	7.70E-04	3.44E-03	4.21E-03
Benzo(g,h,i)perylene	4.97E-16	2.22E-15	2.72E-15
Cumene {isopropylbenzene}	0.00E+00	0.00E+00	0.00E+00
Cyclohexane	0.00E+00	0.00E+00	0.00E+00
Ethylbenzene	1.24E-03	5.55E-03	6.79E-03
Hexane (n-)	1.53E-04	6.84E-04	8.37E-04
Iso-octane {2,2,4 trimethylpentane}	0.00E+00	0.00E+00	0.00E+00
Naphthalene	1.97E-04	8.79E-04	1.08E-03
PACs {Chrysene}	1.03E-13	4.61E-13	5.65E-13
Toluene	9.18E-03	4.10E-02	5.02E-02
Trimethylbenzene (1,2,4)	2.04E-02	9.13E-02	1.12E-01
Xylene	2.42E-02	1.08E-01	1.33E-01

Venture Global CP Express, LLC
LAC 33:III.501.B.5.A.3 - Antifoam Storage Tanks

Tank Description	No. of Tanks[1]	Tank Working Volume[1] (gal)	Operating Rate[1] (gal/yr)
Antifoam Storage Tanks	2	350	700

VOC Emissions[2,3]

Tank Description	Emissions Per Tank	Total VOC Emissions
	(tpy)	
Antifoam Storage Tanks	1.24E-04	2.47E-04
Total	**1.24E-04**	**2.47E-04**

[1] Provided by Venture Global. Operating Rate is based on 2 turnovers per year per tank.

[2] The emissions are calculated based on BREEZE TankESP PRO Version 5.2.0.

[3] Emissions include working and breathing losses.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification:	Antifoam Storage Tank
City:	Lake Charles
State:	LA
Company:	Venture Global CP Express, LLC
Type of Tank:	Horizontal Tank
Description:	Moss Lake Compressor Station

Tank Dimensions

Shell Length (ft):	5.00
Diameter (ft):	4.00
Volume (gallons):	470.01
Turnovers:	1.56
Net Throughput(gal/yr):	700.00
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	White Paint
Shell Condition	New

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
Emissions Report - Detail Format
Liquid Contents of Storage Tank

Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight.	Basis for Vapor Pressure Calculations
Antifoam	All	70.25	65.79	74.71	70.25	0.0200	0.0200	0.0200	157.00			157.00	N/A

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb):	0.1959
Vapor Space Volume (cu ft):	70.0000
Vapor Density (lb/cu ft):	0.0006
Vapor Space Expansion Factor:	0.0296
Vented Vapor Saturation Factor:	0.9983
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	70.0000
Tank Diameter (ft):	4.0000
Effective Diameter (ft):	5.0463
Vapor Space Outage (ft):	3.5000
Tank Shell Length (ft):	5.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0006
Vapor Molecular Weight (lb/lb-mole):	157.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0200
Daily Avg. Liquid Surface Temp. (deg. F):	70.2510
Daily Average Ambient Temp. (deg. F):	68.7004
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.7310
Liquid Bulk Temperature (deg. R):	69.4369
Tank Paint Solar Absorptance (Shell):	0.1700
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.0296
Daily Vapor Temperature Range (deg. R):	17.8525
Daily Vapor Pressure Range (psia):	0.0000
Breather Vent Press. Setting Range (psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0200
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0200
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0200
Daily Avg. Liquid Surface Temp. (deg F):	70.2510
Daily Min. Liquid Surface Temp. (deg F):	65.7879
Daily Max. Liquid Surface Temp. (deg F):	74.7142
Daily Ambient Temp. Range (deg. R):	17.8512
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.9983
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0200
Vapor Space Outage (ft):	3.5000
Working Losses (lb):	0.0515
Vapor Molecular Weight (lb/lb-mole):	157.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0200
Annual Net Throughput (gal/yr):	700.0000
Annual Turnovers:	1.5553
Turnover Factor:	1.0000
Tank Diameter (ft):	4.0000
Working Loss Product Factor:	1.0000
Vapor Control Efficiency (%)	0%
Total Losses (lb):	0.2474

TankESP
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual
Lake Charles, LA

	Losses(lbs)		
Components	Working loss	Breathing Loss	Total Emissions
Antifoam	0.05	0.20	0.25

Venture Global CP Express, LLC
LAC 33:III.501.B.5.A.3 - Lube Oil Storage Tanks

Tank Description	No. of Tanks[1]	Tank Working Volume[1] (gal)	Operating Rate[1] (gal/yr)
Lube Oil Storage Tanks	5	3,500	7,000

VOC Emissions[2,3]

Tank Description	Emissions Per Tank	Total VOC Emissions
	(tpy)	
Lube Oil Storage Tanks	3.98E-04	0.002
Total	**3.98E-04**	**0.002**

[1] Provided by Venture Global. Operating Rate is based on 2 turnovers per year per tank.

[2] The emissions are calculated based on BREEZE TankESP PRO Version 5.2.0.

[3] Emissions include working and breathing losses.

TankESP
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification:	Lube Oil Tank
City:	Lake Charles
State:	LA
Company:	Venture Global CP Express, LLC
Type of Tank:	Horizontal Tank
Description:	Moss Lake Compressor Station

Tank Dimensions

Shell Length (ft):	24.00
Diameter (ft):	5.33
Volume (gallons):	4,010.78
Turnovers:	1.82
Net Throughput(gal/yr):	7,000.00
Insulation Condition:	Not Insulated

Paint Characteristics

Shell Color/Shade:	White Paint
Shell Condition	New

Breather Vent Settings

Vacuum Settings (psig):	
Pressure Settings (psig):	

Meteorological Data used in Emissions Calculations: Lake Charles, LA (Avg Atmospheric Pressure = 14.68 psia)

TankESP
Emissions Report - Detail Format
Liquid Contents of Storage Tank

Lake Charles, LA

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg. F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight.	Basis for Vapor Pressure Calculations
Diesel	All	70.36	66.08	74.65	70.36	0.0091	0.0079	0.0104	130.00			188.0000	Option 3: A=12.101, B=8907
Benzene									78.11	0.0000	0.0020	78.1100	Option 2: A=6.906, B=1211, C=220.79
Benzo(g,h,i)perylene									276.33	0.0000	0.0000	276.3300	Option 2: A=11.82, B=6580, C=273.15
Cumene {isopropylbenzene}									120.1900	0.0000	0.0000	120.1900	Option 2: A=6.929, B=1455.8, C=207.2
Cyclohexane									84.1600	0.0000	0.0000	84.1600	Option 2: A=6.845, B=1203.5, C=222.86
Ethylbenzene									106.1700	0.0001	0.0031	106.1700	Option 2: A=6.95, B=1419.3, C=212.61
Hexane (n-)									86.1800	0.0000	0.0004	86.1800	Option 2: A=6.878, B=1171.5, C=224.37
Iso-octane {2,2,4 trimethylpentane}									114.2300	0.0000	0.0000	114.2300	Option 2: A=6.812, B=1257.8, C=220.74
Naphthalene									128.1700	0.0008	0.0005	128.1700	Option 2: A=7.146, B=1831.6, C=211.82
PACs {Chrysene}									228.2900	0.0000	0.0000	228.2900	Option 2: A=12.32, B=6160, C=273.15
Toluene									92.1400	0.0003	0.0231	92.1400	Option 2: A=7.017, B=1377.6, C=222.64
Trimethylbenzene (1,2,4)									120.1900	0.0100	0.0489	120.1900	Option 2: A=7.044, B=1573.3, C=208.56
Xylene									106.1700	0.0029	0.0597	106.1700	Option 2: A=7.009, B=1462.3, C=215.11

TankESP
Emissions Report - Detail Format
Detail Calculations (AP-42)

Lake Charles, LA

Annual Emission Calculations	
Standing Losses (lb):	0.6017
Vapor Space Volume (cu ft):	280.1651
Vapor Density (lb/cu ft):	0.0002
Vapor Space Expansion Factor:	
Vented Vapor Saturation Factor:	
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	280.1651
Tank Diameter (ft):	5.3333
Effective Diameter (ft):	12.7662
Vapor Space Outage (ft):	2.1888
Tank Shell Length (ft):	24.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0002
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0091
Daily Avg. Liquid Surface Temp. (deg. F):	70.3639
Daily Average Ambient Temp. (deg. F):	68.7004
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.7310
Liquid Bulk Temperature (deg. F):	69.4369
Tank Paint Solar Absorptance (Shell):	0.1700
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	
Daily Vapor Temperature Range (deg. R):	17.1360
Daily Vapor Pressure Range (psia):	0.0025
Breather Vent Press. Setting Range (psia):	
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0091
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0079
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0104
Daily Avg. Liquid Surface Temp. (deg F):	70.3639
Daily Min. Liquid Surface Temp. (deg F):	66.0799
Daily Max. Liquid Surface Temp. (deg F):	74.6479
Daily Ambient Temp. Range (deg. R):	17.8512
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0091
Vapor Space Outage (ft):	2.1888
Working Losses (lb):	0.1935
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0091
Annual Net Throughput (gal/yr.):	7,000.0001
Annual Turnovers:	1.8227
Turnover Factor:	
Tank Diameter (ft):	5.3333
Working Loss Product Factor:	
Vapor Control Efficiency (%)	0%
Total Losses (lb):	0.7952

TankESP
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual
Lake Charles, LA

	Losses(lbs)		
Components	Working loss	Breathing Loss	Total Emissions
Diesel	0.19	0.60	0.80
Unidentified Components	0.17	0.52	0.69
Benzene	0.00	0.00	0.00
Benzo(g,h,i)perylene	0.00	0.00	0.00
Cumene {isopropylbenzene}	0.00	0.00	0.00
Cyclohexane	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00
Hexane (n-)	0.00	0.00	0.00
Iso-octane {2,2,4 trimethylpentane}	0.00	0.00	0.00
Naphthalene	0.00	0.00	0.00
PACs {Chrysene}	0.00	0.00	0.00
Toluene	0.00	0.01	0.02
Trimethylbenzene (1,2,4)	0.01	0.03	0.04
Xylene	0.01	0.04	0.05

APPENDIX D. RACT/BACT/LAER CLEARINGHOUSE SEARCH RESULTS

RBLC Entries for Nitrogen Oxides Control from Simple Cycle Combustion Turbines/Aeroderivative Simple Cycle Combustion Turbines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
CO-0076	PUEBLO AIRPORT GENERATING STATION	CO	09PB0591	12/11/2014	Turbines - two simple cycle gas	Natural Gas	799.7	MMBTU/H each	Nitrogen Oxides (NOx)	SCR and dry low NOx burners	23	LB/H
IL-0121	INVENERGY NELSON EXPANSION LLC	IL	15060042	9/27/2016	Two Simple Cycle Combustion Turbines	Natural Gas	190	MW	Nitrogen Oxides (NOx)	Dry low-NOx combustion technology for natural gas and low-NOx combustion technology and water injection for ULSD	0.033	LB/MMBTU
IN-0261	VERMILLION GENERATING STATION	IN	165-36956-00022	2/28/2017	SIMPLE CYCLE, NATURAL GAS FIRED COMBUSTION TURBINES	Natural Gas	80	MW	Nitrogen Oxides (NOx)	GOOD COMBUSTION PRACTICES	250	LB/H
IN-0264	MONTPELIER GENERATING STATION	IN	179-37209-00026	1/6/2017	PRATT; TWIN-PAC SIMPLE CYCLE TURBINES	Natural Gas	270.9	MMBTU/H	Nitrogen Oxides (NOx)	WATER INJECTION	25	PPMV
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	GE LM6000PC SPRINT Simple cycle combustion turbine	Pipeline quality Natural Gas	405.3	MMBTU/hr	Nitrogen Oxides (NOx)	water injection	25	PPMDV
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	GE LM6000PC SPRINT Simple cycle combustion turbine	Pipeline quality Natural Gas	405.3	MMBTU/hr	Nitrogen Dioxide (NO2)	dry low NOx burners and fire only pipeline natural gas	9	PPMDV
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	GE 7FA Simple Cycle Combustion Turbine	Pipeline quality Natural Gas	1780	MMBTU/HR	Nitrogen Oxides (NOx)	dry low NOx burners and fire only pipeline natural gas	9	PPMDV
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Refrigeration Compressor Turbines (16)	Natural Gas	286	MMBTU/H	Nitrogen Oxides (NOx)	water injection	22.94	LB/H
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Generation Turbines (2)	Natural Gas	286	MMBTU/H	Nitrogen Oxides (NOx)	water injection	28.68	LB/H
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 CO - Simple-Cycle Combustion Turbine 1 (Commissioning) [SCN0005]	Natural Gas	2201	MM BTU/hr	Nitrogen Oxides (NOx)	Pipeline quality natural gas & dry-low-NOX burners	240	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 CO - Simple-Cycle Combustion Turbine 2 (Commissioning) [SCN0006]	Natural Gas	2201	MM BTU/hr	Nitrogen Oxides (NOx)	Pipeline quality natural gas & dry-low-NOX burners	240	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 SUSD - Simple-Cycle Combustion Turbine 1 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0019]	Natural Gas	2201	MM BTU/hR	Nitrogen Oxides (NOx)	Pipeline quality natural gas & dry-low-NOX burners	86.38	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 SUSD - Simple-Cycle Combustion Turbine 2 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0020]	Natural Gas	2201	MM BTU/hr	Nitrogen Oxides (NOx)	Pipeline quality natural gas & dry-low-NOX burners	86.38	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 NO - Simple-Cycle Combustion Turbine 1 (Normal Operations) [EQT0017]	Natural Gas	2201	MM BTU/hr	Nitrogen Oxides (NOx)	Pipeline quality natural gas & dry-low-NOX burners	9	PPMVD @15%O2
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 NO - Simple-Cycle Combustion Turbine 2 (Normal Operations) [EQT0018]	Natural Gas	2201	MM BTU/hr	Nitrogen Oxides (NOx)	Pipeline quality natural gas & dry-low-NOX burners	9	PPMVD @15%O2
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Aeroderivative Simple Cycle Combustion Turbine	Natural Gas	263	MM BTU/h	Nitrogen Oxides (NOx)	Selective Catalytic Reduction (SCR), exclusive combustion of fuel gas, and good combustion practices.	25	PPMV
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Simple Cycle Combustion Turbines (SCCT1 to SCCT3)	Natural Gas	927	MM BTU/h	Nitrogen Oxides (NOx)	Dry Low NOx Combustor Design, Good Combustion Practices, and Natural Gas Combustion.	9	PPMV
MD-0043	PERRYMAN GENERATING STATION	MD	PSC CASE NO. 9136	7/1/2014	(2) 60-MW SIMPLE CYCLE COMBUSTION TURBINES, FIRING NATURAL GAS	Natural Gas	120	MW	Nitrogen Oxides (NOx)	USE OF NATURAL GAS, WATER/STEAM INJECTION, AND A SELECTIVE CATAYTIC REDUCTION (SCR) SYSTEM	2.5	PPMVD @ 15% O2
ND-0030	LONESOME CREEK GENERATING STATION	ND	PTC 13049	9/16/2013	Natural Gas Fired Simple Cycle Turbines	Natural Gas	412	MMBTU/H	Nitrogen Oxides (NOx)	SCR	5	PPMVD
NJ-0086	BAYONNNE ENERGY CENTER	NJ	12863-BOP150001	8/26/2016	Simple Cycle Stationary Turbines firing Natural gas	Natural Gas	2143980	MMBTU/YR	Nitrogen Oxides (NOx)	Selective Catalytic Reduction, water injection, use of natural gas a low NOx emitting fuel	2.5	PPMVD@15%O2
OR-0050	TROUTDALE ENERGY CENTER, LLC	OR	26-0235	3/5/2014	GE LMS-100 combustion turbines, simple cycle with water injection	Natural Gas	1690	MMBTU/H	Nitrogen Oxides (NOx)	Utilize water injection when combusting natural gas or ULSD; Utilize selective catalytic reduction (SCR) with aqueous ammonia injection at all times except during startup and shutdown; Limit the time in startup or shutdown.	2.5	PPMDV AT 15% O2
TX-0688	SR BERTRON ELECTRIC GENERATION STATION	TX	102731, PSDTX1294	12/19/2014	Simple cycle natural gas turbines	Natural Gas	225	MW	Nitrogen Oxides (NOx)	DLN	9	PPM
TX-0690	CEDAR BAYOU ELECTRIC GENERATION STATION	TX	105810, PSDTX1308	9/12/2012	Simple Cycle Combustion Turbines	Natural Gas	225	MW	Nitrogen Oxides (NOx)	DLN	9	PPM
TX-0691	PH ROBINSON ELECTRIC GENERATING STATION	TX	108182 PSDTX1346	5/20/2014	(6) simple cycle turbines	Natural Gas	65	MW	Nitrogen Oxides (NOx)	DLN combustors	15	PPMVD
TX-0696	ROAN's PRAIRIE GENERATING STATION	TX	114698 PSDTX1378	9/22/2014	(2) simple cycle turbines	Natural Gas	600	MW	Nitrogen Oxides (NOx)	DLN combustors	9	PPMVD
TX-0701	ECTOR COUNTY ENERGY CENTER	TX	110423, PSDTX1366	5/13/2013	Simple Cycle Combustion Turbines	Natural Gas	180	MW	Nitrogen Oxides (NOx)	Dry low NOx combustor	9	PPMVD
TX-0733	ANTELOPE ELK ENERGY CENTER	TX	109148, PSDTX1358M1	5/12/2015	Simple Cycle Turbine; Generator	Natural Gas	202	MW	Nitrogen Oxides (NOx)	Dry Low NOx burners	9	PPMVD AT 15% O2
TX-0734	CLEAR SPRINGS ENERGY CENTER (CSEC)	TX	120849 AND PSDTX1414	5/8/2015	Simple Cycle Turbine	Natural Gas	183	MW	Nitrogen Oxides (NOx)	Dry low-NOx (DLN) burners	9	PPMVD @ 15% O2
TX-0764	NACOGDOCHES POWER ELECTRIC GENERATING PLANT	TX	77679, PSDTX1061M1 & O-3455	10/14/2015	Natural Gas Simple Cycle Turbine (25 MW)	Natural Gas	232	MW	Nitrogen Oxides (NOx)	Dry Low NOx burners, good combustion practices, limited operations	9	PPMVD @ 15% O2
TX-0768	SHAWNEE ENERGY CENTER	TX	PSDTX1442, 125963	10/9/2015	Simple cycle turbines greater than 25 megawatts (MW)	Natural Gas	230	MW	Nitrogen Oxides (NOx)	Dry Low NOx burners	9	PPMVD @ 15% O2
TX-0769	VAN ALSTYNE ENERGY CENTER (VAEC)	TX	121051 AND PSDTX1418	10/27/2015	Simple Cycle Turbine	Natural Gas	183	MW	Nitrogen Oxides (NOx)	DLN burners	9	PPMVD @ 15% O2
TX-0777	UNION VALLEY ENERGY CENTER	TX	120973 AND PSDTX1420	12/9/2015	Simple Cycle Turbine	Natural Gas	183	MW	Nitrogen Oxides (NOx)	Dry low NOX burners	9	PPMVD @ 15% O2

RBLC Entries for Nitrogen Oxides Control from Simple Cycle Combustion Turbines/Aeroderivative Simple Cycle Combustion Turbines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
TX-0794	HILL COUNTY GENERATING FACILITY	TX	130051,PSDTX1450, GHGPSDTX131	4/7/2016	Simple cycle turbine	Natural Gas	171	MW	Nitrogen Oxides (NOx)	Emission controls consist of dry low-NOx combustors (DLN). DLN combustors use two stages of combustion, transitioning from initial startup with fuel and flame in the primary nozzles only, through a lean lean stage with fuel and flame in the primary and secondary nozzles, to fuel in the secondary stage only, extinguishing the primary flame, and in full operation, premix mode, with fuel to both nozzles, but flame only in the second stage. When natural gas and air are well-mixed before combustion, the flame temperature and resulting NOx emissions are greatly reduced compared to conventional diffusion flame combustion.	9	PPMVD @ 15% O2
TX-0819	GAINES COUNTY POWER PLANT	TX	135322, PSDTX1470, AND GHGPSDT	4/28/2017	Simple Cycle Turbine	Natural Gas	227.5	MW	Nitrogen Oxides (NOx)	Dry Low NOx burners (control), natural gas, good combustion practices, limited operating hours (prevention)	9	PPMV
TX-0826	MUSTANG STATION	TX	72579, PSDTX1080M1, GHGPSDTX13	8/16/2017	Simple Cycle Turbine	Natural Gas	162.8	MW	Nitrogen Oxides (NOx)	Dry low-NOx burners	9	PPMVD
*VA-0326	DOSWELL ENERGY CENTER	VA	51018	10/4/2016	Two (2) GE 7FA simple cycle combustion turbines	Natural Gas	1961	MMBTU/HR	Nitrogen Oxides (NOx)	Low NOx Burners/Combustion Technology	9	PPM
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP03)	Natural Gas	40	MW	Nitrogen Oxides (NOx)	SCR	5	PPMV AT 15% O2
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Trubine (EP04)	Natural Gas	40	MW	Nitrogen Oxides (NOx)	SCR	5	PPMV AT 15% O2
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP05)	Natural Gas	40	MW	Nitrogen Oxides (NOx)	SCR	5	PPMV AT 15% O2
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	PG-PEAKERS: 2 natural gas fired simple cycle combustion turbines	Natural Gas	171	MMBTU/H	Nitrogen Oxides (NOx)	Dry low-NOx combustors	0.09	LB/MMBTU
MI-0426	DTE GAS COMPANY - MILFORD COMPRESSOR STATION	MI	185-15A	3/24/2017	FGTURNBINES (5 Simple Cycle CTs: EUTURBINE1, EUTURBINE2, EUTURBINE3, EUTURBINE4, EUTURBINE5)	Natural Gas	10504	HP	Nitrogen Oxides (NOx)	Dry ultra-low NOx burners.	15	PPM
TX-0685	GUADALUPE GENERATING STATION	TX	106011 PSDTX1310	10/4/2013	(2) simple cycle turbines	Natural Gas	190	MW	Nitrogen Oxides (NOx)	DLN burners, limited operation	9	PPMVD
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Six (6) Simple Cycle Gas-Turbines (Power Generation)	Natural Gas	386	MMBtu/hr	Nitrogen Oxides (NOx)	DLN combustors and Good Combustion Practices	15	PPMV @ 15% O2
*LA-0343	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M7)	9/6/2019	gas turbines during startups, shutdowns, and maintenance	Natural gas	0	-	Nitrogen Oxides (NOx)	good combustion practices	96	PPMV
*TX-0900	ECTOR COUNTY ENERGY CENTER	TX	110423, PSDTX1366M1 GHGPSD49M1	8/17/2020	Simple Cycle Turbines	Natural gas	0	-	Nitrogen Oxides (NOx)	Equipped with dry-low NOx burners with best management practices and good combustion practices. Minimize the duration of startup and shutdown events to less than 60 minutes per event. Limit MSS by 140 lb/hr maximum allowable emission rate for each turbine.	9	PPMVD
*AL-0329	COLBERT COMBUSTION TURBINE PLANT	AL	701-0010	9/21/2021	Three 229 MW Simple Cycle Combustion Turbines	Natural Gas	229	MW	Nitrogen Oxides (NOx)	-	9	PPMVD
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUCTGSC1-natural gas fired simple cycle CTG	Natural gas	667	MMBTU/H	Nitrogen Oxides (NOx)	DLNB and good combustion practices.	25	PPM

RBLC Entries for Carbon Monoxide Control from Simple Cycle Combustion Turbines/Aeroderivative Simple Cycle Combustion Turbines

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
CO-0076	PUEBLO AIRPORT GENERATING STATION	CO	09PB0591	12/11/2014	Turbines - two simple cycle gas	Natural Gas	799.7	MMBTU/H each	Carbon Monoxide	Catalytic Oxidation.	55	LB/H
IN-0261	VERMILLION GENERATING STATION	IN	165-36956-00022	2/28/2017	SIMPLE CYCLE, NATURAL GAS FIRED COMBUSTION TURBINES	Natural Gas	80	MW	Carbon Monoxide	GOOD COMBUSTION PRACTICES	525	LB/H
IN-0264	MONTPELIER GENERATING STATION	IN	179-37209-00026	1/6/2017	PRATT TWIN-PAC SIMPLE CYCLE TURBINES	Natural Gas	270.9	MMBTU/H	Carbon Monoxide	NATURAL GAS AS PRIMARY FUEL; GOOD COMBUSTION PRACTICES	0.2	LB/MMBTU
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	GE LM6000PC SPRINT Simple cycle combustion turbine	Pipeline quality Natural Gas	405.3	MMBTU/hr	Carbon Monoxide	Utilize efficient combustion/design technology	63.8	LB/HR
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	GE 7FA Simple Cycle Combustion Turbine	Pipeline quality Natural Gas	1780	MMBTU/HR	Carbon Monoxide	Utilize efficient combustion/design technology	39	LB/HR
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Refrigeration Compressor Turbines (16)	Natural Gas	286	MMBTU/H	Carbon Monoxide	Good combustion practices and fueled by natural gas	43.6	LB/H
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Generation Turbines (2)	Natural Gas	286	MMBTU/H	Carbon Monoxide	Good combustion practices and fueled by natural gas	17.46	LB/H
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 CO - Simple-Cycle Combustion Turbine 1 (Commissioning) [SCN0005]	Natural Gas	2201	MM BTU/hr	Carbon Monoxide	Good combustion practices & use of pipeline quality natural gas	2000	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 CO - Simple-Cycle Combustion Turbine 2 (Commissioning) [SCN0006]	Natural Gas	2201	MM BTU/hr	Carbon Monoxide	Good combustion practices & use of pipeline quality natural gas	2000	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 SUSD - Simple-Cycle Combustion Turbine 1 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0019]	Natural Gas	2201	MM BTU/hR	Carbon Monoxide	Good combustion practices & use of pipeline quality natural gas	800.08	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 SUSD - Simple-Cycle Combustion Turbine 2 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0020]	Natural Gas	2201	MM BTU/hr	Carbon Monoxide	Good combustion practices & use of pipeline quality natural gas	800.08	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 NO - Simple-Cycle Combustion Turbine 1 (Normal Operations) [EQT0017]	Natural Gas	2201	MM BTU/hr	Carbon Monoxide	Good combustion practices & use of pipeline quality natural gas	6	PPMVD AT 15% OXYGEN
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 NO - Simple-Cycle Combustion Turbine 2 (Normal Operations) [EQT0018]	Natural Gas	2201	MM BTU/hr	Carbon Monoxide	Good combustion practices & use of pipeline quality natural gas	6	PPMVD AT 15% O2
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Aeroderivative Simple Cycle Combustion Turbine	Natural Gas	263	MM BTU/h	Carbon Monoxide	Proper Equipment Design, Proper Operation, and Good Combustion Practices.	36	PPMV
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Simple Cycle Combustion Turbines (SCCT1 to SCCT3)	Natural Gas	927	MM BTU/h	Carbon Monoxide	Proper Equipment Design, Proper Operation, and Good Combustion Practices.	25	PPMV
ND-0030	LONESOME CREEK GENERATING STATION	ND	PTC 13049	9/16/2013	Natural Gas Fired Simple Cycle Turbines	Natural Gas	412	MMBTU/H	Carbon Monoxide	Oxidation Catalyst	6	PPMVD
NJ-0086	BAYONNNE ENERGY CENTER	NJ	12863-BOP150001	8/26/2016	Simple Cycle Stationary Turbines firing Natural gas	Natural Gas	2143980	MMBTU/YR	Carbon Monoxide	Add-on control is CO Oxidation Catalyst, and use of natural gas as fuel for pollution prevention	5	PPMVD@15% O2
OR-0050	TROUTDALE ENERGY CENTER, LLC	OR	26-0235	3/5/2014	GE LMS-100 combustion turbines, simple cycle with water injection	Natural Gas	1690	MMBTU/H	Carbon Monoxide	Oxidation catalyst; Limit the time in startup or shutdown.	6	PPMDV AT 15% O2
TX-0688	SR BERTRON ELECTRIC GENERATION STATION	TX	102731, PSDTX1294	12/19/2014	Simple cycle natural gas turbines	Natural Gas	225	MW	Carbon Monoxide	Good Combustion Practices	9	PPM
TX-0690	CEDAR BAYOU ELECTRIC GERNERATION STATION	TX	105810, PSDTX1308	9/12/2012	Simple Cycle Combustion Turbines	Natural Gas	225	MW	Carbon Monoxide	Good Combustion Practices	9	PPM
TX-0701	ECTOR COUNTY ENERGY CENTER	TX	110423, PSDTX1366	5/13/2013	Simple Cycle Combustion Turbines	Natural Gas	180	MW	Carbon Monoxide	Good combustion practices	9	PPMVD
TX-0733	ANTELOPE ELK ENERGY CENTER	TX	109148, PSDTX1358M1	5/12/2015	Simple Cycle Turbine Generator	Natural Gas	202	MW	Carbon Monoxide	Good combustion practices; limited operating hours	9	PPMVD @ 15% O2
TX-0794	HILL COUNTY GENERATING FACILITY	TX	130051,PSDTX1450, GHGPSDTX131	4/7/2016	Simple cycle turbine	Natural Gas	171	MW	Carbon Monoxide	Premixing of fuel and air enhances combustion efficiency and minimizes emissions.	9	PPMVD @ 15% O2
TX-0819	GAINES COUNTY POWER PLANT	TX	135322, PSDTX1470, AND GHGPSDT	4/28/2017	Simple Cycle Turbine	Natural Gas	227.5	MW	Carbon Monoxide	Good combustion practices; limited operating hours	9	PPMVD
*VA-0326	DOSWELL ENERGY CENTER	VA	51018	10/4/2016	Two (2) GE 7FA simple cycle combustion turbines	Natural Gas	1961	MMBTU/HR	Carbon Monoxide	Pipeline Quality Natural Gas	13.99	LB

RBLC Entries for Carbon Monoxide Control from Simple Cycle Combustion Turbines/Aeroderivative Simple Cycle Combustion Turbines

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP03)	Natural Gas	40	MW	Carbon Monoxide	Oxidiation Catalyst	6	PPMV AT 15% O2
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Trubine (EP04)	Natural Gas	40	MW	Carbon Monoxide	Oxidation Catalyst	6	PPMV AT 15% O2
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP05)	Natural Gas	40	MW	Carbon Monoxide	Oxidation Catalyst	6	PPMV AT 15% O2
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	FG-PEAKERS: 2 natural gas fired simple cycle combustion turbines	Natural Gas	171	MMBTU/H	Carbon Monoxide	Efficient combustion	0.11	LB/MMBTU
MI-0426	DTE GAS COMPANY - MILFORD COMPRESSOR STATION	MI	185-15A	3/24/2017	FGTURNBINES (5 Simple Cycle CTs: EUTURBINE1, EUTURBINE2, EUTURBINE3, EUTURBINE4, EUTURBINE5)	Natural Gas	10504	HP	Carbon Monoxide	Good combustion practices and clean burn fuel (pipeline quality natural gas).	25	PPM
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Six (6) Simple Cycle Gas-Turbines (Power Generation)	Natural Gas	386	MMBtu/hr	Carbon Monoxide	Good Combustion Practices and burning clean fuels (NG)	15	PPMV @ 15% O2
LA-0383	LAKE CHARLES LNG EXPORT TERMINAL	LA	PSD-LA-838	9/3/2020	Turbines (EQT0020 - EQT0031)	Natural gas	0	-	Carbon Monoxide	catalytic oxidation and carbon monoxide turndown	10	PPMVD @15%O2
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUCTGSC1-natural gas fired simple cycle CTG	Natural gas	667	MMBTU/H	Carbon Monoxide	Dry low NOx burners and good combustion practices	9	LB/H
TX-0933	NACERO PENWELL FACILITY	TX	164137 PSDTX1594 GHGPSDTX207	11/17/2021	TURBINE	NATURAL GAS	0	-	Carbon Monoxide	Oxidization catalyst, good combustion practices and the use of gaseous fuel	9	PPMVD
*TX-0915	UNIT 5	TX	160538, PSDTX1528, GHGPSDTX204	3/17/2021	SIMPLE CYCLE TURBINE	NATURAL GAS	14552539	MMBTU/YR	Carbon Monoxide	Oxidation catalyst	3.5	PPMVD

RBLC Entries for Particulate Matter Control from Simple Cycle Combustion Turbines/Aeroderivative Simple Cycle Combustion Turbines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
CO-0075	PUEBLO AIRPORT GENERATING STATION	CO	13PB2245	5/30/2014	Turbine - simple cycle gas	Natural Gas	375	MMBTU/H	Particulate matter, total (TPM10)	Firing of pipeline quality natural gas as defined in 40 CFR Part 72. Specifically, the owner or the operator shall demonstrate that the natural gas burned has total sulfur content less than 0.5 grains/100 SCF	4.8	LB/H
CO-0075	PUEBLO AIRPORT GENERATING STATION	CO	13PB2245	5/30/2014	Turbine - simple cycle gas	Natural Gas	375	MMBTU/H	Particulate matter, total (TPM2.5)	Firing of pipeline quality natural gas as defined in 40 CFR Part 72. Specifically, the owner or the operator shall demonstrate that the natural gas burned has total sulfur content less than 0.5 grains/100 SCF	4.8	LB/H
IL-0121	INVENERGY NELSON EXPANSION LLC	IL	15060042	9/27/2016	Two Simple Cycle Combustion Turbines	Natural Gas	190	MW	Particulate matter, filterable (FPM)	Turbine design and good combustion practices	0.0038	LB/MMBTU
IL-0121	INVENERGY NELSON EXPANSION LLC	IL	15060042	9/27/2016	Two Simple Cycle Combustion Turbines	Natural Gas	190	MW	Particulate matter, total (TPM10)	Turbine design and good combustion practices	0.005	LB/MMBTU
IL-0121	INVENERGY NELSON EXPANSION LLC	IL	15060042	9/27/2016	Two Simple Cycle Combustion Turbines	Natural Gas	190	MW	Particulate matter, total (TPM2.5)	Turbine design and good combustion practices	0.005	LB/MMBTU
IN-0261	VERMILLION GENERATING STATION	IN	165-36956-00022	2/28/2017	SIMPLE CYCLE, NATURAL GAS FIRED COMBUSTION TURBINES	Natural Gas	80	MW	Particulate matter, filterable (FPM)	GOOD COMBUSTION PRACTICES	5	LB/H
IN-0261	VERMILLION GENERATING STATION	IN	165-36956-00022	2/28/2017	SIMPLE CYCLE, NATURAL GAS FIRED COMBUSTION TURBINES	Natural Gas	80	MW	Particulate matter, filterable (FPM10)	GOOD COMBUSTION PRACTICES	5	LB/H
IN-0261	VERMILLION GENERATING STATION	IN	165-36956-00022	2/28/2017	SIMPLE CYCLE, NATURAL GAS FIRED COMBUSTION TURBINES	Natural Gas	80	MW	Particulate matter, total (TPM2.5)	GOOD COMBUSTION PRACTICES	5	LB/H
IN-0264	MONTPELIER GENERATING STATION	IN	179-37209-00026	1/6/2017	PRATT; TWIN-PAC SIMPLE CYCLE TURBINES	Natural Gas	270.9	MMBTU/H	Particulate matter, filterable (FPM10)	USE NATURAL GAS AS PRIMARY FUEL, GOOD COMBUSTION PRACTICES	0.0066	LB/MMBTU
IN-0264	MONTPELIER GENERATING STATION	IN	179-37209-00026	1/6/2017	PRATT; TWIN-PAC SIMPLE CYCLE TURBINES	Natural Gas	270.9	MMBTU/H	Particulate matter, total (TPM2.5)	NATURAL GAS PRIMARY FUEL, GOOD COMBUSTION PRACTICES	0.0066	LB/MMBTU
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	GE LM6000PC SPRINT Simple cycle combustion turbine	Pipeline quality Natural Gas	405.3	MMBTU/hr	Particulate matter, total (TPM10)	Fire only pipeline quality natural gas	6	LB/HR
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	GE LM6000PC SPRINT Simple cycle combustion turbine	Pipeline quality Natural Gas	405.3	MMBTU/hr	Particulate matter, total (TPM)	Fire only pipeline quality natural gas	6	LB/HR
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	GE 7FA Simple Cycle Combustion Turbine	Pipeline quality Natural Gas	1780	MMBTU/HR	Particulate matter, total (TPM10)	Will fire only pipeline quality natural gas	18	LB/HR
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	GE 7FA Simple Cycle Combustion Turbine	Pipeline quality Natural Gas	1780	MMBTU/HR	Particulate matter, total (TPM)	Will fire only pipeline quality natural gas	18	LB/HR
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Refrigeration Compressor Turbines (16)	Natural Gas	286	MMBTU/H	Particulate matter, total (TPM)	Good combustion practices and fueled by natural gas	2.08	LB/H
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Generation Turbines (2)	Natural Gas	286	MMBTU/H	Particulate matter, total (TPM)	Good combustion practices and fueled by natural gas	2.08	LB/H
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 CO - Simple-Cycle Combustion Turbine 1 (Commissioning) [SCN0005]	Natural Gas	2201	MM BTU/hr	Particulate matter, total (TPM10)	Good combustion practices and the use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 CO - Simple-Cycle Combustion Turbine 1 (Commissioning) [SCN0005]	Natural Gas	2201	MM BTU/hr	Particulate matter, total (TPM2.5)	Good combustion practices and the use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 CO - Simple-Cycle Combustion Turbine 2 (Commissioning) [SCN0006]	Natural Gas	2201	MM BTU/hr	Particulate matter, total (TPM10)	Good combustion practices and the use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 CO - Simple-Cycle Combustion Turbine 2 (Commissioning) [SCN0006]	Natural Gas	2201	MM BTU/hr	Particulate matter, total (TPM2.5)	Good combustion practices and the use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 SUSD - Simple-Cycle Combustion Turbine 1 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0019]	Natural Gas	2201	MM BTU/hR	Particulate matter, total (TPM2.5)	Good combustion practices and the use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 SUSD - Simple-Cycle Combustion Turbine 1 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0019]	Natural Gas	2201	MM BTU/hR	Particulate matter, total (TPM10)	Good combustion practices and the use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 SUSD - Simple-Cycle Combustion Turbine 2 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0020]	Natural Gas	2201	MM BTU/hr	Particulate matter, total (TPM2.5)	Good combustion practices and the use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 SUSD - Simple-Cycle Combustion Turbine 2 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0020]	Natural Gas	2201	MM BTU/hr	Particulate matter, total (TPM10)	Good combustion practices and the use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 NO - Simple-Cycle Combustion Turbine 1 (Normal Operations) [EQT0017]	Natural Gas	2201	MM BTU/hr	Particulate matter, total (TPM10)	Good combustion practices and the use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 NO - Simple-Cycle Combustion Turbine 1 (Normal Operations) [EQT0017]	Natural Gas	2201	MM BTU/hr	Particulate matter, total (TPM2.5)	Good combustion practices & use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 NO - Simple-Cycle Combustion Turbine 2 (Normal Operations) [EQT0018]	Natural Gas	2201	MM BTU/hr	Particulate matter, total (TPM10)	Good combustion practices and the use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 NO - Simple-Cycle Combustion Turbine 2 (Normal Operations) [EQT0018]	Natural Gas	2201	MM BTU/hr	Particulate matter, total (TPM2.5)	Good combustion practices & use of low sulfur fuels (pipeline quality natural gas)	6.3	LB/HR
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Aeroderivative Simple Cycle Combustion Turbine	Natural Gas	263	MM BTU/h	Particulate matter, total (TPM10)	Exclusive Combustion of Fuel Gas, Good Combustion Practices Including Proper Burner Design.	4.5	LB/H
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Aeroderivative Simple Cycle Combustion Turbine	Natural Gas	263	MM BTU/h	Particulate matter, total (TPM2.5)	Exclusive Combustion of Fuel Gas, Good Combustion Practices Including Proper Burner Design.	4.5	LB/H
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Simple Cycle Combustion Turbines (SCCT1 to SCCT3)	Natural Gas	927	MM BTU/h	Particulate matter, total (TPM10)	Exclusive Combustion of Fuel Gas and Good Combustion Practices, Including Proper Burner Design.	8	LB/H
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Simple Cycle Combustion Turbines (SCCT1 to SCCT3)	Natural Gas	927	MM BTU/h	Particulate matter, total (TPM2.5)	Exclusive Combustion of Fuel Gas and Good Combustion Practices, Including Proper Burner Design.	8	LB/H

RBLC Entries for Particulate Matter Control from Simple Cycle Combustion Turbines/Aeroderivative Simple Cycle Combustion Turbines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
MD-0043	PERRYMAN GENERATING STATION	MD	PSC CASE NO. 9136	7/1/2014	(2) 60-MW SIMPLE CYCLE COMBUSTION TURBINES, FIRING NATURAL GAS	Natural Gas	120	MW	Particulate matter, total (TPM10)	GOOD COMBUSTION PRACTICES AND USE OF NATURAL GAS	5	LB/H
NJ-0086	BAYONNNE ENERGY CENTER	NJ	12863-BOP150001	8/26/2016	Simple Cycle Stationary Turbines firing Natural gas	Natural Gas	2143980	MMBTU/YR	Particulate matter, filterable (FPM)	Use of Natural gas a clean burning fuel	5	LB/H
NJ-0086	BAYONNNE ENERGY CENTER	NJ	12863-BOP150001	8/26/2016	Simple Cycle Stationary Turbines firing Natural gas	Natural Gas	2143980	MMBTU/YR	Particulate matter, total (TPM10)	Use of Natural gas a clean burning fuel	5	LB/H
NJ-0086	BAYONNNE ENERGY CENTER	NJ	12863-BOP150001	8/26/2016	Simple Cycle Stationary Turbines firing Natural gas	Natural Gas	2143980	MMBTU/YR	Particulate matter, total (TPM2.5)	Use of natural gas a clean burning fuel	5	LB/H
OR-0050	TROUTDALE ENERGY CENTER, LLC	OR	26-0235	3/5/2014	GE LMS-100 combustion turbines, simple cycle with water injection	Natural Gas	1690	MMBTU/H	Particulate matter, total (TPM10)	Utilize only natural gas or ULSD fuel; Limit the time in startup or shutdown.	9.1	LB/H TOTAL PM
TX-0688	SR BERTRON ELECTRIC GENERATION STATION	TX	102731, PSDTX1294	12/19/2014	Simple cycle natural gas turbines	Natural Gas	225	MW	Particulate matter, filterable (FPM2.5)	Good Combustion Practices, natural gas	0	-
TX-0690	CEDAR BAYOU ELECTRIC GERNERATION STATION	TX	105810, PSDTX1308	9/12/2012	Simple Cycle Combustion Turbines	Natural Gas	225	MW	Particulate matter, filterable (FPM2.5)	Good Combustion Practices, Natural Gas	0	-
TX-0701	ECTOR COUNTY ENERGY CENTER	TX	110423, PSDTX1366	5/13/2013	Simple Cycle Combustion Turbines	Natural Gas	180	MW	Particulate matter, total (TPM2.5)	Firing pipeline quality natural gas and good combustion practices	0	-
TX-0733	ANTELOPE ELK ENERGY CENTER	TX	109148, PSDTX1358M1	5/12/2015	Simple Cycle Turbine; Generator	Natural Gas	202	MW	Particulate matter, total (TPM2.5)	Pipeline quality natural gas; limited hours; good combustion practices	0	-
TX-0733	ANTELOPE ELK ENERGY CENTER	TX	109148, PSDTX1358M1	5/12/2015	Simple Cycle Turbine; Generator	Natural Gas	202	MW	Particulate matter, total (TPM10)	Pipeline quality natural gas; limited hours; good combustion practices	0	-
TX-0733	ANTELOPE ELK ENERGY CENTER	TX	109148, PSDTX1358M1	5/12/2015	Simple Cycle Turbine; Generator	Natural Gas	202	MW	Particulate matter, total (TPM)	Pipeline quality natural gas; limited hours; good combustion practices	0	-
TX-0764	NACOGDOCHES POWER ELECTRIC GENERATING PLANT	TX	77679, PSDTX1061M1 & O-3455	10/14/2015	Natural Gas Simple Cycle Turbine (25 MW)	Natural Gas	232	MW	Particulate matter, total (TPM)	Pipeline quality natural gas; limited hours; good combustion practices	12.09	LB/HR
TX-0764	NACOGDOCHES POWER ELECTRIC GENERATING PLANT	TX	77679, PSDTX1061M1 & O-3455	10/14/2015	Natural Gas Simple Cycle Turbine (25 MW)	Natural Gas	232	MW	Particulate matter, total (TPM10)	Pipeline quality natural gas; limited hours; good combustion practices	12.09	LB/HR
TX-0764	NACOGDOCHES POWER ELECTRIC GENERATING PLANT	TX	77679, PSDTX1061M1 & O-3455	10/14/2015	Natural Gas Simple Cycle Turbine (25 MW)	Natural Gas	232	MW	Particulate matter, total (TPM2.5)	Pipeline quality natural gas; limited hours; good combustion practices	12.09	LB/HR
TX-0768	SHAWNEE ENERGY CENTER	TX	PSDTX1442, 125963	10/9/2015	Simple cycle turbines greater than 25 megawatts (MW)	Natural Gas	230	MW	Particulate matter, total (TPM10)	Pipeline quality natural gas; limited hours; good combustion practices	84.1	LB/HR
TX-0768	SHAWNEE ENERGY CENTER	TX	PSDTX1442, 125963	10/9/2015	Simple cycle turbines greater than 25 megawatts (MW)	Natural Gas	230	MW	Particulate matter, total (TPM2.5)	Pipeline quality natural gas; limited hours; good combustion practices	84.1	LB/HR
TX-0769	VAN ALSTYNE ENERGY CENTER (VAEC)	TX	121051 AND PSDTX1418	10/27/2015	Simple Cycle Turbine	Natural Gas	183	MW	Particulate matter, total (TPM10)	Pipeline Quality Natural Gas	8.6	LB/H
TX-0769	VAN ALSTYNE ENERGY CENTER (VAEC)	TX	121051 AND PSDTX1418	10/27/2015	Simple Cycle Turbine	Natural Gas	183	MW	Particulate matter, total (TPM2.5)	Pipeline Quality Natural Gas	8.6	LB/H
TX-0777	UNION VALLEY ENERGY CENTER	TX	120973 AND PSDTX1420	12/9/2015	Simple Cycle Turbine	Natural Gas	183	MW	Particulate matter, total (TPM10)	Pipeline quality natural gas, good combustion practices	8.6	LB/H
TX-0777	UNION VALLEY ENERGY CENTER	TX	120973 AND PSDTX1420	12/9/2015	Simple Cycle Turbine	Natural Gas	183	MW	Particulate matter, total (TPM2.5)	Pipeline quality natural gas, good combustion practices	8.6	LB/H
TX-0794	HILL COUNTY GENERATING FACILITY	TX	130051,PSDTX1450, GHGPSDTX131	4/7/2016	Simple cycle turbine	Natural Gas	171	MW	Particulate matter, total (TPM10)	Premixing of fuel and air enhances combustion efficiency and minimizes emissions.	14	LB/H
TX-0794	HILL COUNTY GENERATING FACILITY	TX	130051,PSDTX1450, GHGPSDTX131	4/7/2016	Simple cycle turbine	Natural Gas	171	MW	Particulate matter, total (TPM2.5)	Premixing of fuel and air enhances combustion efficiency and minimizes emissions.	14	LB/H
TX-0819	GAINES COUNTY POWER PLANT	TX	135322, PSDTX1470, AND GHGPSDT	4/28/2017	Simple Cycle Turbine	Natural Gas	227.5	MW	Particulate matter, total (TPM)	Pipeline quality natural gas; limited hours; good combustion practices	8.5	T/YR
TX-0819	GAINES COUNTY POWER PLANT	TX	135322, PSDTX1470, AND GHGPSDT	4/28/2017	Simple Cycle Turbine	Natural Gas	227.5	MW	Particulate matter, total (TPM10)	Pipeline quality natural gas; limited hours; good combustion practices	8.5	T/YR
TX-0819	GAINES COUNTY POWER PLANT	TX	135322, PSDTX1470, AND GHGPSDT	4/28/2017	Simple Cycle Turbine	Natural Gas	227.5	MW	Particulate matter, total (TPM2.5)	Pipeline quality natural gas; limited hours; good combustion practices	8.5	T/YR
TX-0826	MUSTANG STATION	TX	72579, PSDTX1080M1, GHGPSDTX13	8/16/2017	Simple Cycle Turbine	Natural Gas	162.8	MW	Particulate matter, total (TPM10)	Pipeline quality natural gas and good combustion practices	27	T/YR
TX-0826	MUSTANG STATION	TX	72579, PSDTX1080M1, GHGPSDTX13	8/16/2017	Simple Cycle Turbine	Natural Gas	162.8	MW	Particulate matter, total (TPM2.5)	Pipeline quality natural gas and good combustion practices	27	T/YR
*VA-0326	DOSWELL ENERGY CENTER	VA	51018	10/4/2016	Two (2) GE 7FA simple cycle combustion turbines	Natural Gas	1961	MMBTU/HR	Particulate matter, filterable (FPM)	Good combustion, operation and maintenance practices and use of pipeline quality natural gas	10	LB
*VA-0326	DOSWELL ENERGY CENTER	VA	51018	10/4/2016	Two (2) GE 7FA simple cycle combustion turbines	Natural Gas	1961	MMBTU/HR	Particulate matter, filterable (FPM10)	Good combustion, operation and maintenance practices and use of pipeline quality natural gas	12	LB
*VA-0326	DOSWELL ENERGY CENTER	VA	51018	10/4/2016	Two (2) GE 7FA simple cycle combustion turbines	Natural Gas	1961	MMBTU/HR	Particulate matter, total (TPM2.5)	Good combustion, operation and maintenance practices and use of pipeline quality natural gas	12	LB
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP03)	Natural Gas	40	MW	Particulate matter, total (TPM)	Good combustion practices	4	LB/H
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Trubine (EP04)	Natural Gas	40	MW	Particulate matter, total (TPM)	Good combustion practices	4	LB/H
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP05)	Natural Gas	40	MW	Particulate matter, total (TPM)	Good combustion practices	4	LB/H

RBLC Entries for Particulate Matter Control from Simple Cycle Combustion Turbines/Aeroderivative Simple Cycle Combustion Turbines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	FG-PEAKERS: 2 natural gas fired simple cycle combustion turbines	Natural Gas	171	MMBTU/H	Particulate matter, total (TPM10)	Efficient combustion; natural gas fuel.	0.02	LB/MMBTU
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	FG-PEAKERS: 2 natural gas fired simple cycle combustion turbines	Natural Gas	171	MMBTU/H	Particulate matter, total (TPM2.5)	Efficient combustion; natural gas fuel.	0.02	LB/MMBTU
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	FG-PEAKERS: 2 natural gas fired simple cycle combustion turbines	Natural Gas	171	MMBTU/H	Particulate matter, filterable (FPM)	Efficient combustion; natural gas fuel.	0.01	LB/MMBTU
MI-0426	DTE GAS COMPANY - MILFORD COMPRESSOR STATION	MI	185-15A	3/24/2017	FGTURNBINES (5 Simple Cycle CTs: EUTURBINE1, EUTURBINE2, EUTURBINE3, EUTURBINE4, EUTURBINE5)	Natural Gas	10504	HP	Particulate matter, total (TPM10)	Combustion air inlet filter, pipeline quality natural gas and good combustion practices.	0.015	LB/MMBTU
MI-0426	DTE GAS COMPANY - MILFORD COMPRESSOR STATION	MI	185-15A	3/24/2017	FGTURNBINES (5 Simple Cycle CTs: EUTURBINE1, EUTURBINE2, EUTURBINE3, EUTURBINE4, EUTURBINE5)	Natural Gas	10504	HP	Particulate matter, total (TPM2.5)	Combustion air inlet filter, pipeline quality natural gas, and good combustion practices.	0.015	LB/MMBTU
TX-0685	GUADALUPE GENERATING STATION	TX	106011 PSDTX1310	10/4/2013	(2) simple cycle turbines	Natural Gas	190	MW	Particulate matter, total (TPM2.5)	Natural gas fuel	0	-
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Six (6) Simple Cycle Gas-Turbines (Power Generation)	Natural Gas	386	MMBtu/hr	Particulate matter, total (TPM)	Good Combustion Practices and burning clean fuels (NG)	0.007	LB/MMBTU
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Six (6) Simple Cycle Gas-Turbines (Power Generation)	Natural Gas	386	MMBtu/hr	Particulate matter, total (TPM10)	Good Combustion Practices and burning clean fuels (NG)	0.007	LB/MMBTU
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Six (6) Simple Cycle Gas-Turbines (Power Generation)	Natural Gas	386	MMBtu/hr	Particulate matter, total (TPM2.5)	Good Combustion Practices and burning clean fuels (NG)	0.007	LB/MMBTU
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUCTGSC1-natural gas fired simple cycle CTG	Natural gas	667	MMBTU/H	Particulate matter, total (TPM2.5)	Pipeline quality natural gas, inlet air conditioning and good combustion practices.	4.5	LB/H
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUCTGSC1-natural gas fired simple cycle CTG	Natural gas	667	MMBTU/H	Particulate matter, total (TPM10)	Pipeline quality natural gas, inlet air conditioning and good combustion practices.	4.5	LB/H
*TX-0915	UNIT 5	TX	160538, PSDTX1528, GHGPSDTX204	3/17/2021	SIMPLE CYCLE TURBINE	NATURAL GAS	14552539	MMBTU/YR	Particulate matter, filterable (FPM)	Low sulfur natural gas fuel	0	-
TX-0915	UNIT 5	TX	160538, PSDTX1528, GHGPSDTX204	3/17/2021	SIMPLE CYCLE TURBINE	NATURAL GAS	14552539	MMBTU/YR	Particulate matter, filterable (FPM10)	Low sulfur natural gas fuel	0	-
TX-0915	UNIT 5	TX	160538, PSDTX1528, GHGPSDTX204	3/17/2021	SIMPLE CYCLE TURBINE	NATURAL GAS	14552539	MMBTU/YR	Particulate matter, filterable (FPM2.5)	Low sulfur natural gas fuel	0	-

RBLC Entries for Volatile Organic Compounds Control from Simple Cycle Combustion Turbines/Aeroderivative Simple Cycle Combustion Turbines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
IN-0261	VERMILLION GENERATING STATION	IN	165-36956-00022	2/28/2017	SIMPLE CYCLE, NATURAL GAS FIRED COMBUSTION TURBINES	Natural Gas	80	MW	Volatile Organic Compounds (VOC)	GOOD COMBUSTION PRACTICES	17.6	LB/H
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	GE LM6000PC SPRINT Simple cycle combustion turbine	Pipeline quality Natural Gas	405.3	MMBTU/hr	Volatile Organic Compounds (VOC)	Utilize efficient combustion/design technology	5.8	LB/HR
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	GE 7FA Simple Cycle Combustion Turbine	Pipeline quality Natural Gas	1780	MMBTU/HR	Volatile Organic Compounds (VOC)	Will utilize efficient combustion/design technology	3.2	LB/HR
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Refrigeration Compressor Turbines (16)	Natural Gas	286	MMBTU/H	Volatile Organic Compounds (VOC)	Good combustion practices and fueled by natural gas	0.66	LB/H
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Generation Turbines (2)	Natural Gas	286	MMBTU/H	Volatile Organic Compounds (VOC)	Good combustion practices and fueled by natural gas	0.66	LB/H
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 CO - Simple-Cycle Combustion Turbine 1 (Commissioning) [SCN0005]	Natural Gas	2201	MM BTU/hr	Volatile Organic Compounds (VOC)	Good combustion practices & use of pipeline quality natural gas	0	-
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 CO - Simple-Cycle Combustion Turbine 2 (Commissioning) [SCN0006]	Natural Gas	2201	MM BTU/hr	Volatile Organic Compounds (VOC)	Good combustion practices & use of pipeline quality natural gas	0	-
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 SUSD - Simple-Cycle Combustion Turbine 1 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0019]	Natural Gas	2201	MM BTU/hR	Volatile Organic Compounds (VOC)	Good combustion practices & use of pipeline quality natural gas	0	-
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 SUSD - Simple-Cycle Combustion Turbine 2 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0020]	Natural Gas	2201	MM BTU/hr	Volatile Organic Compounds (VOC)	Good combustion practices & use of pipeline quality natural gas	0	-
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 NO - Simple-Cycle Combustion Turbine 1 (Normal Operations) [EQT0017]	Natural Gas	2201	MM BTU/hr	Volatile Organic Compounds (VOC)	Good combustion practices & use of pipeline quality natural gas	0	-
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 NO - Simple-Cycle Combustion Turbine 2 (Normal Operations) [EQT0018]	Natural Gas	2201	MM BTU/hr	Volatile Organic Compounds (VOC)	Good combustion practices & use of pipeline quality natural gas	0	-
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Aeroderivative Simple Cycle Combustion Turbine	Natural Gas	263	MM BTU/h	Volatile Organic Compounds (VOC)	Proper Equipment Design, Proper Operation, and Good Combustion Practices.	1.5	PPMV
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Simple Cycle Combustion Turbines (SCCT1 to SCCT3)	Natural Gas	927	MM BTU/h	Volatile Organic Compounds (VOC)	Proper Equipment Design, Proper Operation, and Good Combustion Practices.	1.4	PPMV
NJ-0086	BAYONNNE ENERGY CENTER	NJ	12863-BOP150001	8/26/2016	Simple Cycle Stationary Turbines firing Natural gas	Natural Gas	2143980	MMBTU/YR	Volatile Organic Compounds (VOC)	Add-on VOC control is Oxidation Catalyst, and use of natural gas as fuel for pollution prevention	2	PPMVD@15 %O2
OR-0050	TROUTDALE ENERGY CENTER, LLC	OR	26-0235	3/5/2014	GE LMS-100 combustion turbines, simple cycle with water injection	Natural Gas	1690	MMBTU/H	Volatile Organic Compounds (VOC)	Oxidation catalyst; Limit the time in startup or shutdown.	0	-
TX-0696	ROAN's PRAIRIE GENERATING STATION	TX	114698 PSDTX1378	9/22/2014	(2) simple cycle turbines	Natural Gas	600	MW	Volatile Organic Compounds (VOC)	Good combustion	1.4	PPMVD
TX-0733	ANTELOPE ELK ENERGY CENTER	TX	109148, PSDTX1358M1	5/12/2015	Simple Cycle Turbine; Generator	Natural Gas	202	MW	Volatile Organic Compounds (VOC)	Good combustion practices	2	PPMVD @ 15% O2
TX-0764	NACOGDOCHES POWER ELECTRIC GENERATING PLANT	TX	77679, PSDTX1061M1 & O-3455	10/14/2015	Natural Gas Simple Cycle Turbine (25 MW)	Natural Gas	232	MW	Volatile Organic Compounds (VOC)	Pipeline quality natural gas; limited hours; good combustion practices.	2	PPMVD @ 15% O2
TX-0768	SHAWNEE ENERGY CENTER	TX	PSDTX1442, 125963	10/9/2015	Simple cycle turbines greater than 25 megawatts (MW)	Natural Gas	230	MW	Volatile Organic Compounds (VOC)	Pipeline quality natural gas; limited hours; good combustion practices.	1.4	PPMV
TX-0794	HILL COUNTY GENERATING FACILITY	TX	130051,PSDTX1450, GHGPSDTX131	4/7/2016	Simple cycle turbine	Natural Gas	171	MW	Volatile Organic Compounds (VOC)	Premixing of fuel and air enhances combustion efficiency and minimizes emissions.	5.4	LB/H
TX-0819	GAINES COUNTY POWER PLANT	TX	135322, PSDTX1470, AND GHGPSDT	4/28/2017	Simple Cycle Turbine	Natural Gas	227.5	MW	Volatile Organic Compounds (VOC)	Pipeline quality natural gas; limited hours; good combustion practices	2	PPMVD
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP03)	Natural Gas	40	MW	Volatile Organic Compounds (VOC)	Oxidation Catalyst	3	PPMV AT 15% O2
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Trubine (EP04)	Natural Gas	40	MW	Volatile Organic Compounds (VOC)	Oxidation Catalyst	3	PPMV AT 15% O2
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP05)	Natural Gas	40	MW	Volatile Organic Compounds (VOC)	Oxidation Catalyst	3	PPMV AT 15% O2
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	FG-PEAKERS: 2 natural gas fired simple cycle combustion turbines	Natural Gas	171	MMBTU/H	Volatile Organic Compounds (VOC)	Efficient combustion; natural gas fuel.	0.017	LB/MMBTU
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Six (6) Simple Cycle Gas-Turbines (Power Generation)	Natural Gas	386	MMBtu/hr	Volatile Organic Compounds (VOC)	Good Combustion Practices and burning clean fuels (NG)	0.0022	LB/MMBTU
*TX-0915	UNIT 5	TX	160538, PSDTX1528, GHGPSDTX204	3/17/2021	SIMPLE CYCLE TURBINE	NATURAL GAS	14552539	MMBTU/YR	Volatile Organic Compounds (VOC)	Oxidation catalyst	1.5	PPMVD

RBLC Entries for Greenhouse Gases Control from Simple Cycle Combustion Turbines/Aeroderivative Simple Cycle Combustion Turbines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
CO-0075	PUEBLO AIRPORT GENERATING STATION	CO	13PB2245	5/30/2014	Turbine - simple cycle gas	Natural Gas	375	MMBTU/H	Carbon Dioxide Equivalent (CO2e)	Good Combustion Control	1600	LB/MW H GROSS
IL-0121	INVENERGY NELSON EXPANSION LLC	IL	15060042	9/27/2016	Two Simple Cycle Combustion Turbines	Natural Gas	190	MW	Carbon Dioxide Equivalent (CO2e)	Turbine-generator design and proper operation	-	-
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Refrigeration Compressor Turbines (16)	Natural Gas	286	MMBTU/H	Carbon Dioxide Equivalent (CO2e)	Good combustion/operating practices and fueled by natural gas - use GE LM2500+G4 turbines	4872107	TONS/YR
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Generation Turbines (2)	Natural Gas	286	MMBTU/H	Carbon Dioxide Equivalent (CO2e)	Good combustion/operating practices and fueled by natural gas - use GE LM2500+G4 turbines	4872107	TONS/YR
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 SUSD - Simple-Cycle Combustion Turbine 1 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0019]	Natural Gas	2201	MM BTU/hR	Carbon Dioxide Equivalent (CO2e)	Facility-wide energy efficiency measures , such as improved combustion measures, and use of pipeline quality natural gas.	120	LB/MM BTU
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 SUSD - Simple-Cycle Combustion Turbine 2 (Startup/Shutdown/ Maintenance/Tuning/Runback) [EQT0020]	Natural Gas	2201	MM BTU/hr	Carbon Dioxide Equivalent (CO2e)	Facility-wide energy efficiency measures , such as improved combustion measures, and use of pipeline quality natural gas.	120	LB/MM BTU
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG01 NO - Simple-Cycle Combustion Turbine 1 [Normal Operations] [EQT0017]	Natural Gas	2201	MM BTU/hr	Carbon Dioxide Equivalent (CO2e)	Facility-wide energy efficiency measures , such as improved combustion measures, and use of pipeline quality natural gas.	50	KG/GJ
*LA-0327	WASHINGTON PARISH ENERGY CENTER	LA	PSD-LA-829	5/23/2018	CTG02 NO - Simple-Cycle Combustion Turbine 2 [Normal Operations] [EQT0018]	Natural Gas	2201	MM BTU/hr	Carbon Dioxide Equivalent (CO2e)	Facility-wide energy efficiency measures , such as improved combustion measures, and use of pipeline quality natural gas.	50	KG/GJ
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Aeroderivative Simple Cycle Combustion Turbine	Natural Gas	263	MM BTU/h	Carbon Dioxide Equivalent (CO2e)	Combust low carbon fuel gas, good combustion practices, good operation and maintenance practices and insulation.	134907	T/YR
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Simple Cycle Combustion Turbines (SCCT1 to SCCT3)	Natural Gas	927	MM BTU/h	Carbon Dioxide Equivalent (CO2e)	Exclusively combust low carbon fuel gas, good combustion practices, good operation and maintenance practices, and insulation	1426146	T/YR
MD-0043	PERRYMAN GENERATING STATION	MD	PSC CASE NO. 9136	7/1/2014	(2) 60-MW SIMPLE CYCLE COMBUSTION TURBINES, FIRING NATURAL GAS	Natural Gas	120	MW	Carbon Dioxide Equivalent (CO2e)	USE OF NATURAL GAS, ENERGY EFFICIENCY DESIGN - USE OF INLET FOGGING/WET COMPRESSION, INSULATION BLANKETS TO REDUCE HEAT LOSS, AND FUEL GAS PREHEATING.	1394	LB CO2E/MWH
ND-0030	LONESOME CREEK GENERATING STATION	ND	PTC 13049	9/16/2013	Natural Gas Fired Simple Cycle Turbines	Natural Gas	412	MMBTU/H	Carbon Dioxide Equivalent (CO2e)	High efficiency turbines	220122	TONS
OR-0050	TROUTDALE ENERGY CENTER, LLC	OR	26-0235	3/5/2014	GE LMS-100 combustion turbines, simple cycle with water injection	Natural Gas	1690	MMBTU/H	Carbon Dioxide Equivalent (CO2e)	Thermal efficiency Clean fuels	1707	LB OF CO2 /GROSS MWH
TX-0735	ANTELOPE ELK ENERGY CENTER	TX	GHGPSDTX41M1	5/20/2015	Simple Cycle Turbine; Generator	Natural Gas	202	MW	Carbon Dioxide Equivalent (CO2e)	Energy efficiency, good design & combustion practices	1304	LB CO2/MWHR
TX-0775	CLEAR SPRINGS ENERGY CENTER (CSEC)	TX	GHGPSDTX120, 120849, AND PSDTX	11/13/2015	Simple Cycle Turbine	Natural Gas	183	MW	Carbon Dioxide Equivalent (CO2e)	Low carbon fuel, good combustion, efficient combined cycle design	1461	LB/MW H
TX-0819	GAINES COUNTY POWER PLANT	TX	135322, PSDTX1470, AND GHGPSDT	4/28/2017	Simple Cycle Turbine	Natural Gas	227.5	MW	Carbon Dioxide Equivalent (CO2e)	Pipeline quality natural gas; limited hours; good combustion practices	1300	LB/MW H
TX-0824	JACKSON COUNTY GENERATING FACILITY	TX	GHGPSDTX118	6/30/2017	Simple Cycle Turbines	Natural Gas	920	MW	Carbon Dioxide Equivalent (CO2e)	Energy efficiency designs, practices, and procedures, CT inlet air cooling, periodic CT burner maintenance and tuning, reduction in heat loss, i.e., insulation of the CT, instrumentation and controls	1316	LB/MW HR
TX-0826	MUSTANG STATION	TX	72579, PSDTX1080M1, GHGPSDTX13	8/16/2017	Simple Cycle Turbine	Natural Gas	162.8	MW	Carbon Dioxide Equivalent (CO2e)	Pipeline quality natural gas and good combustion practices	120	LB/MMBTU
*VA-0326	DOSWELL ENERGY CENTER	VA	51018	10/4/2016	Two (2) GE 7FA simple cycle combustion turbines	Natural Gas	1961	MMBTU/HR	Carbon Dioxide Equivalent (CO2e)	Good combustion, maintenance and use ofive combustion dynamic monitoring systems,	-	-
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	FG-PEAKERS: 2 natural gas fired simple cycle combustion turbines	Natural Gas	171	MMBTU/H	Carbon Dioxide Equivalent (CO2e)	Efficient combustion; energy efficiency	20141	T/YR
MI-0426	DTE GAS COMPANY - MILFORD COMPRESSOR STATION	MI	185-15A	3/24/2017	FGTURNBINES (5 Simple Cycle CTs: EUTURBINE1, EUTURBINE2, EUTURBINE3, EUTURBINE4, EUTURBINE5)	Natural Gas	10504	HP	Carbon Dioxide Equivalent (CO2e)	Use of pipeline quality natural gas and energy efficiency measures.	196998	T/YR
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Six (6) Simple Cycle Gas-Turbines (Power Generation)	Natural Gas	386	MMBtu/hr	Carbon Dioxide Equivalent (CO2e)	Good combustion practices and clean burning fuel (NG)	117.1	LB/MMBTU
LA-0383	LAKE CHARLES LNG EXPORT TERMINAL	LA	PSD-LA-838	9/3/2020	Turbines (EQT0020 - EQT0031)	Natural gas	-	-	Carbon Dioxide Equivalent (CO2e)	Low carbon fuels Energy efficient designs and operation	-	-
*TX-0900	ECTOR COUNTY ENERGY CENTER	TX	110423, PSDTX1366M1 GHGPSD49M1	8/17/2020	Simple Cycle Turbines	natural gas	-	-	Carbon Dioxide Equivalent (CO2e)	Best management practices and good combustion practices, clean fuel	1514	LB/MWHR
*TX-0915	UNIT 5	TX	160538, PSDTX1528, GHGPSDTX204	3/17/2021	SIMPLE CYCLE TURBINE	NATURAL GAS	14552539	MMBTU/YR	Carbon Dioxide Equivalent (CO2e)	Low sulfur natural gas fuel	-	-
TX-0933	NACERO PENWELL FACILITY	TX	164137 PSDTX1594 GHGPSDTX207	11/17/2021	TURBINE	NATURAL GAS	-	-	Carbon Dioxide Equivalent (CO2e)	good combustion practices and the use of gaseous fuel	-	-

RBLC Entries for Nitrogen Oxides Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
AK-0083	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT06	1/6/2015	Diesel Fired Well Pump	Diesel	2.7	MMBTU/H	Nitrogen Oxides (NOx)	Limited Operation of 168 hr/yr.	4.41	LB/MMBTU
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Black Start and Emergency Internal Cumbustion Engines	Diesel	1500	kWe	Nitrogen Oxides (NOx)	Good Combustion Practices	8	G/KW-HR
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Fire Pump Diesel Internal Combustion Engines	Diesel	252	hp	Nitrogen Oxides (NOx)	Good Combustion Practices	3.7	G/KW-HR
CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	EMERGENCY FIREWATER PUMP ENGINE	Diesel	288	HP	Nitrogen Oxides (NOx)	EQUIPPED W/ A TURBOCHARGER AND AN INTERCOOLER/AFTERCOOLER	3.4	G/HP-H
CA-1219	CITY OF SAN DIEGO PUD (PUMP STATION 1)	CA	2012--APP-002009	7/9/2012	IC engine	Diesel	2722	bhp	Nitrogen Oxides (NOx)	Tier 2 certified engine and 50 hr/yr for M&T	4	G/B-HP-H
FL-0354	LAUDERDALE PLANT	FL	0110037-013-AC	8/25/2015	Emergency fire pump engine, 300 HP	Diesel	29	MMBTU/H	Nitrogen Oxides (NOx)	Low-emitting fuel and certified engine	4	G / KWH
*FL-0367	SHADY HILLS COMBINED CYCLE FACILITY	FL	1010524-001-AC	7/27/2018	Emergency Fire Pump Engine (347 HP)	ULSD	8700	gal/year	Nitrogen Oxides (NOx)	Operate and maintain the engine according to the manufacturer's written instructions	4	G/KW-HR
IL-0114	CRONUS CHEMICALS, LLC	IL	13060007	9/5/2014	Firewater Pump Engine	distillate fuel oil	373	hp	Nitrogen Oxides (NOx)	Tier IV standards for non-road engines at 40 CFR 1039.102, Table 7.	3.5	G/KW-H
IN-0158	ST. JOSEPH ENEGRY CENTER, LLC	IN	141-31003-00579	12/3/2012	TWO (2) FIREWATER PUMP Diesel ENGINES	Diesel	371	BHP, EACH	Nitrogen Oxides (NOx)	COMBUSTION DESIGN CONTROLS AND USAGE LIMITS	3	G/HP-H
IN-0166	INDIANA GASIFICATION, LLC	IN	T147-30464-00060	6/27/2012	THREE (3) FIREWATER PUMP ENGINES	Diesel	575	HORSEPOWER, EACH	Nitrogen Oxides (NOx)	GOOD COMBUSTION PRACTICES AND LIMITED HOURS OF NON-EMERGENCY OPERATION	0	-
IN-0234	GRAIN PROCESSING CORPORATION	IN	027-35177-00046	12/8/2015	EMERGENCY FIRE PUMP ENGINE	DISTILLATE OIL	0	-	Nitrogen Oxides (NOx)	GOOD COMBUSTION PRACTICES	9.5	G/HP-H
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	Caterpillar C18DITA Diesel Engine Generator	No. 2 Distillate Fuel Oil	900	BHP	Nitrogen Oxides (NOx)	Utilize efficient combustion/design technology	14	LB/HR
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	Cummins 6BTA 5.9F-1 Diesel Engine Fire Pump	No. 2 Fuel Oil	182	BHP	Nitrogen Oxides (NOx)	Utilize efficient combustion/design technology	2	LB/HR
LA-0305	LAKE CHARLES METHANOL FACILITY	LA	PSD-LA-803(M1)	6/30/2016	Diesel Engines (Emergency)	Diesel	4023	hp	Nitrogen Oxides (NOx)	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0307	MAGNOLIA LNG FACILITY	LA	PSD-LA-792	3/21/2016	Diesel Engines	Diesel	0	-	Nitrogen Oxides (NOx)	Good combustion practices, Use Ultra Low Sulfur Diesel, and comply with 40 CFR 60 Subpart IIII	0	-
LA-0308	MORGAN CITY POWER PLANT	LA	PSD-LA-767	9/26/2013	2000 KW Diesel Fired Emergency Generator Engine	Diesel	20.4	MMBTU/hr	Nitrogen Oxides (NOx)	Good combustion and maintenance practices, and compliance with NSPS 40 CFR 60 Subpart IIII	33.07	LB/H
LA-0308	MORGAN CITY POWER PLANT	LA	PSD-LA-767	9/26/2013	380 HP Diesel Fired Pump Engine	Diesel	2.3	MMBTU/hr	Nitrogen Oxides (NOx)	Good combustion and maintenance practices, and compliance with NSPS 40 CFR 60 Subpart IIII	2.92	LB/H
LA-0309	BENTELER STEEL TUBE FACILITY	LA	PSD-LA-774(M1)	6/4/2015	Firewater Pump Engines	Diesel	288	hp (each)	Nitrogen Oxides (NOx)	Complying with 40 CFR 60 Subpart IIII	3	G/BHP-HR
LA-0309	BENTELER STEEL TUBE FACILITY	LA	PSD-LA-774(M1)	6/4/2015	Emergency Generator Engines	Diesel	2922	hp (each)	Nitrogen Oxides (NOx)	Complying with 40 CFR 60 Subpart IIII	6.4	G/KW-HR
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DFP1-13 - Diesel Fire Pump Engine (EQT0013)	Diesel	650	horsepower	Nitrogen Oxides (NOx)	Compliance with NSPS Subpart IIII	6.6	LB/HR
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DEG1-13 - Diesel Fired Emergency Generator Engine (EQT0012)	Diesel	1474	horsepower	Nitrogen Oxides (NOx)	Compliance with NSPS Subpart IIII	19.23	LB/HR
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Diesel Firewater pump engines (6 units)	Diesel	425	hp	Nitrogen Oxides (NOx)	Complying with 40 CFR 63 subpart ZZZZ	0	-
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Diesel emergency generator engine - EGEN	Diesel	350	hp	Nitrogen Oxides (NOx)	Complying with 40 CFR 63 subpart ZZZZ	0	-
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 1	Diesel	751	HP	Nitrogen Oxides (NOx)	Compliance with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	4.6	LB/H
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 2	Diesel	751	HP	Nitrogen Oxides (NOx)	Compliance with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	4.6	LB/H
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	firewater pump engines (8 units)	Diesel	460	hp	Nitrogen Dioxide (NO2)	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	emergency generator engines (6 units)	Diesel	3353	hp	Nitrogen Oxides (NOx)	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0317	METHANEX - GEISMAR METHANOL PLANT	LA	PSD-LA-761(M4)	12/22/2016	Emergency Generator Engines (4 units)	Diesel	0	-	Nitrogen Oxides (NOx)	Complying with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0	-
LA-0317	METHANEX - GEISMAR METHANOL PLANT	LA	PSD-LA-761(M4)	12/22/2016	Firewater pump Engines (4 units)	Diesel	896	hp (each)	Nitrogen Oxides (NOx)	Complying with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Fire Water Diesel Pump No. 3 Engine	Diesel Fuel	600	hp	Nitrogen Oxides (NOx)	Proper operation and limits on hours operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Fire Water Diesel Pump No. 4 Engine	Diesel Fuel	600	hp	Nitrogen Oxides (NOx)	Proper operation and limits on hours of operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Standby Generator No. 9 Engine	Diesel Fuel	400	hp	Nitrogen Oxides (NOx)	Proper operation and limits on hours of operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39A	Diesel Fuel	375	HP	Nitrogen Oxides (NOx)	Good combustion practices and NSPS IIII	4	G/KW-H
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39B	Diesel Fuel	300	HP	Nitrogen Oxides (NOx)	Good combustion practices and NSPS Subpart IIII	4	G/KW-H
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Firewater Pumps	Diesel Fuel	634	kW	Nitrogen Oxides (NOx)	Good Combustion and Operating Practices.	3.1	G/HP-H
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Large Emergency Engines (50kW)	Diesel Fuel	5364	HP	Nitrogen Oxides (NOx)	Good Combustion and Operating Practices	5.6	G/KW-H

RBLC Entries for Nitrogen Oxides Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
MD-0041	CPV ST. CHARLES	MD	PSC CASE NO. 9280	4/23/2014	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	ULTRA-LOW SULFUR Diesel	300	HP	Nitrogen Oxides (NOx)	EXCLUSIVE USE OF ULSD FUEL, GOOD COMBUSTION PRACTICES, AND LIMITING THE HOURS OF OPERATION	3	G/HP-H
*MD-0042	WILDCAT POINT GENERATION FACILITY	MD	CPCN CASE NO. 9327	4/8/2014	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	Ultra Low Sulfur Diesel	477	HP	Nitrogen Oxides (NOx)	LIMITED OPERATING HOURS, USE OF ULTRA- LOW SULFUR FUEL AND GOOD COMBUSTION PRACTICES	3	G/HP-H
MD-0043	PERRYMAN GENERATING STATION	MD	PSC CASE NO. 9136	7/1/2014	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	ULTRAL LOW SULFUR Diesel	350	HP	Nitrogen Oxides (NOx)	GOOD COMBUSTION PRACTICES, LIMITED HOURS OF OPERATION, AND EXCLUSIVE USE OF ULSD	3	G/HP-H
MD-0044	COVE POINT LNG TERMINAL	MD	PSC CASE NO. 9318	6/9/2014	5 EMERGENCY FIRE WATER PUMP ENGINES	Ultra Low Sulfur Diesel	350	HP	Nitrogen Oxides (NOx)	GOOD COMBUSTION PRACTICES AND DESIGNED TO ACHIEVE EMISSION LIMIT	3	G/HP-H
MD-0045	MATTAWOMAN ENERGY CENTER	MD	PSC CASE. NO. 9330	11/13/2015	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	ULTRA-LOW SULFUR Diesel	305	HP	Nitrogen Oxides (NOx)	EXCLUSIVE USE OF Ultra Low Sulfur FUEL AND GOOD COMBUSTION PRACTICES	4	G/KW-H
MD-0046	KEYS ENERGY CENTER	MD	PSC CASE NO. 9297	10/31/2014	Diesel-FIRED AUXILIARY (EMERGENCY) ENGINES (TWO)	ULTRA-LOW SULFUR Diesel	1500	KW	Nitrogen Oxides (NOx)	EXCLUSIVE USE OF Ultra Low Sulfur FUEL AND GOOD COMBUSTION PRACTICES	6.4	G/KW-H
MD-0046	KEYS ENERGY CENTER	MD	PSC CASE NO. 9297	10/31/2014	Diesel-FIRED FIRE PUMP ENGINE	ULTRA-LOW SULFUR Diesel	300	HP	Nitrogen Oxides (NOx)	EXCLUSIVE USE OF Ultra Low Sulfur Diesel FUEL AND GOOD COMBUSTION PRACTICES	4	G/KW-H
MI-0402	SUMPTER POWER PLANT	MI	81-11	11/17/2011	Diesel fuel-fired combustion engine (RICE)	Diesel	732	HP	Nitrogen Oxides (NOx)	Good combustion practices	4.85	G/HP-H
MI-0406	RENAISSANCE POWER LLC	MI	51-13	11/1/2013	FG-EMGEN7-8; Two (2) 1,000kW Diesel-fueled emergency reciprocating internal combustion engines	Diesel	1000	kW	Nitrogen Oxides (NOx)	Good combustion practices	4.8	G/B-HP-H
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	EU-FPENGINE: Diesel fuel fired emergency backup fire pump	Diesel fuel	315	hp nameplate	Nitrogen Oxides (NOx)	Proper combustion design and Ultra Low Sulfur Diesel fuel.	3	G/HP-H
MI-0412	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13	12/4/2013	Emergency Engine --Diesel Fire Pump (EUFPENGINE)	Diesel	165	HP	Nitrogen Oxides (NOx)	Good combustion practices	3	G/HP-H
MI-0418	WARREN TECHNICAL CENTER	MI	160-11B	1/14/2015	FG-BACKUPGENS (Nine (9) DRUPS Emergency Engines)	Diesel	3490	KW	Nitrogen Oxides (NOx)	No add-on controls, but injection timing retardation (ITR) is good design. Engines are tuned for low-NOx operation versus low CO operation.	8	G/KW-H
MI-0418	WARREN TECHNICAL CENTER	MI	160-11B	1/14/2015	Four (4) emergency engines in FG-BACKUPGENS	Diesel	2710	KW	Nitrogen Oxides (NOx)	No add-on controls, but injection timing retardation (ITR) is good design. Engines are tuned for low-NOx operation versus low CO operation.	7.13	G/KW-H
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Emergency Diesel Generator Engine (EUEMRGRICE in FGRICE)	Diesel	500	H/YR	Nitrogen Oxides (NOx)	Certified engines, limited operating hours.	22.6	LB/H
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Dieself fire pump engine (EUFIREPUMP in FGRICE)	Diesel	500	H/YR	Nitrogen Oxides (NOx)	Certified engines, limited operating hours.	3.53	LB/H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUEMENGINE (Diesel fuel emergency engine)	Diesel Fuel	22.68	MMBTU/H	Nitrogen Oxides (NOx)	Good combustion practices and meeting NSPS IIII requirements.	6.4	G/KW-H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	1.66	MMBTU/H	Nitrogen Oxides (NOx)	Good combustion practices and meeting NSPS Subpart IIII requirements.	3	G/BHP-H
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13C	12/5/2016	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	500	H/YR	Nitrogen Oxides (NOx)	Good combustion practices.	3	G/HP-H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE1 in FGRICE (Emergency Diesel generator engine)	Diesel	500	H/YR	Nitrogen Oxides (NOx)	Certified engines, limited operating hours.	21.2	LB/H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE2 in FGRICE (Emergency Diesel Generator Engine)	Diesel	500	H/YR	Nitrogen Oxides (NOx)	Certified engines, limited operating hours	4.4	LB/H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUFIREPUMP in FGRICE (Diesel fire pump engine)	Diesel	500	H/YR	Nitrogen Oxides (NOx)	Certified engines. Limited operating hours.	3.53	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (South Plant): Fire pump engine	Diesel	300	HP	Nitrogen Oxides (NOx)	Good combustion practices and meeting NSPS Subpart IIII requirements.	3	G/BHP-H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (North Plant): Emergency Engine	Diesel	1341	HP	Nitrogen Oxides (NOx)	Good combustion practices and meeting NSPS Subpart IIII requirements.	6.4	G/KW-H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (North Plant): Fire pump engine	Diesel	300	HP	Nitrogen Oxides (NOx)	Good combustion practices and meeting NSPS Subpart IIII requirements.	3	G/BHP-H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (South Plant): Emergency Engine	Diesel	1341	HP	Nitrogen Oxides (NOx)	Good combustion practices and meeting NSPS IIII requirements.	6.4	G/KW-H
MI-0434	FLAT ROCK ASSEMBLY PLANT	MI	122-17	3/22/2018	EUENGINE01 through EUENGINE08	Diesel	3633	BHP	Nitrogen Oxides (NOx)	Good combustion practices.	6.4	G/KW-H
MI-0434	FLAT ROCK ASSEMBLY PLANT	MI	122-17	3/22/2018	EUFIREPUMPENGS (2 emergency fire pump engines)	Diesel	250	BHP	Nitrogen Oxides (NOx)	Good combustion practices.	3	G/B-HP-H
MI-0434	FLAT ROCK ASSEMBLY PLANT	MI	122-17	3/22/2018	EULIFESAFETYENG - One Diesel-fueled emergency engine/generator	Diesel	500	KW	Nitrogen Oxides (NOx)	Good combustion practices.	4	G/KW-H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUEMENGINE: Emergency engine	Diesel	2	MW	Nitrogen Oxides (NOx)	State of the art combustion design.	6.4	G/KW-H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUFPENGINE: Fire pump engine	Diesel	399	BHP	Nitrogen Oxides (NOx)	State of the art combustion design.	4	G/KW-H

RBLC Entries for Nitrogen Oxides Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
OH-0345	DP&L J.M. STUART GENERATING STATION	OH	P0106503	8/16/2011	Crusher/screener with 300 HP 110 HP Diesel engines	Diesel	0	-	Nitrogen Oxides (NOx)	Tier III CARB Certified Diesel Engines	2.48	LB/H
OH-0352	OREGON CLEAN ENERGY CENTER	OH	P0110840	6/18/2013	Emergency fire pump engine	Diesel	300	HP	Nitrogen Oxides (NOx)	Purchased certified to the standards in NSPS Subpart IIII	1.7	LB/H
OH-0360	CARROLL COUNTY ENERGY	OH	P0113762	11/5/2013	Emergency fire pump engine (P004)	Diesel	400	HP	Nitrogen Oxides (NOx)	Purchased certified to the standards in NSPS Subpart IIII	2.3	LB/H
OH-0363	NTE OHIO, LLC	OH	P0116610	11/5/2014	Emergency Fire Pump Engine (P003)	Diesel fuel	260	HP	Nitrogen Oxides (NOx)	Emergency operation only, < 500 hours/year each for maintenance checks and readiness testing designed to meet NSPS Subpart IIII	1.72	LB/H
*OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	OH	P0117655	8/25/2015	Emergency fire pump engine (P004)	Diesel fuel	140	HP	Nitrogen Oxides (NOx)	State-of-the-art combustion design	0.81	LB/H
*OH-0367	SOUTH FIELD ENERGY LLC	OH	P0119495	9/23/2016	Emergency fire pump engine (P004)	Diesel fuel	311	HP	Nitrogen Oxides (NOx)	State-of-the-art combustion design	1.79	LB/H
*OH-0368	PALLAS NITROGEN LLC	OH	P0118959	4/19/2017	Emergency Fire Pump Diesel Engine (P008)	Diesel fuel	460	HP	Nitrogen Oxides (NOx)	Good combustion control and operating practices and engines designed to meet the stands of 40 CFR Part 60, Subpart IIII	0.3	LB/H
*OH-0370	TRUMBULL ENERGY CENTER	OH	P0122331	9/7/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Nitrogen Oxides (NOx)	State-of-the-art combustion design	1.97	LB/H
*OH-0372	OREGON ENERGY CENTER	OH	P0121049	9/27/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Nitrogen Oxides (NOx)	State-of-the-art combustion design	1.97	LB/H
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Generator Engine (P001)	Diesel fuel	2206	HP	Nitrogen Oxides (NOx)	Good combustion design	24.71	LB/H
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Fire Pump Engine (P002)	Diesel fuel	700	HP	Nitrogen Oxides (NOx)	Good combustion design	4.97	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Firewater Pumps (P005 and P006)	Diesel fuel	402	HP	Nitrogen Oxides (NOx)	Certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII and employ good combustion practices per the manufacturer's operating manual	2.64	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Emergency Diesel-fired Generator Engine (P007)	Diesel fuel	3353	HP	Nitrogen Oxides (NOx)	Certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII, shall employ good combustion practices per the manufacturer's operating manual	37.41	LB/H
OK-0154	MOORELAND GENERATING STA	OK	2008-302-C(M-1)PSD	7/2/2013	Diesel-FIRED EMERGENCY GENERATOR ENGINE	Diesel	1341	HP	Nitrogen Oxides (NOx)	COMBUSTION CONTROL	0.011	LB/HP-HR
OK-0173	CMC STEEL OKLAHOMA	OK	2015-0643-C PSD	1/19/2016	Emergency Diesel Engines	Ultra-low sulfur Diesel	15	ppm by weight sulfur	Nitrogen Oxides (NOx)	The applicant has proposed BACT for the control of NOx emissions resulting from the combustion of fuel oil for the emergency generators and fire pump as the use of low sulfur No. 2 fuel oil combined with good combustion practices and limited annual operation.	0	-
SC-0113	PYRAMAX CERAMICS, LLC	SC	0160-0023	2/8/2012	EMERGENCY ENGINE 1 THRU 8	Diesel	29	HP	Nitrogen Oxides (NOx)	PURCHASE OF CERTIFIED ENGINE.	7.5	GR/KW-H
SC-0113	PYRAMAX CERAMICS, LLC	SC	0160-0023	2/8/2012	FIRE PUMP	Diesel	500	HP	Nitrogen Oxides (NOx)	PURCHASE OF CERTIFIED ENGINE BASED ON NSPS, SUBPART IIII.	4	GR/KW-H
TX-0671	PROJECT JUMBO	TX	108446/PSDTX1352	12/1/2014	Engines	Ultra Low Sulfur Diesel fuel	0	-	Nitrogen Oxides (NOx)	Each emergency generator's emission factor is based on EPA's Tier 2 standards at 40CFR89.112 for NOx	5.43	G/KW-H
TX-0822	CEMENT PLANT	TX	7369, PSDTX120M4, AND GHGPSDTX	6/30/2017	Emergency Engine	Diesel	0	-	Nitrogen Oxides (NOx)	GOOD COMBUSTION PRACTICES	0.48	LB/HR
TX-0846	MOTOR VEHICLE ASSEMBLY PLANT	TX	70661, PSDTX1036M1, GHGPSDTX18	9/23/2018	FIRE PUMP Diesel ENGINE	NO 2 Diesel	214	kW	Nitrogen Oxides (NOx)	Meets EPA Tier 4 requirements	0.4	G/KW
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Diesel Fire Pump Engine (EP16)	Ultra Low Sulfur Diesel	327	hp	Nitrogen Oxides (NOx)	EPA Tier 3 rated	0	-
*VA-0328	C4GT, LLC	VA	52588	4/26/2018	Emergency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Nitrogen Oxides (NOx)	Good combustion practices and the use of Ultra Low Sulfur Diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	3	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-02 - North Water System Emergency Generator	Diesel	2922	HP	Nitrogen Oxides (NOx)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	4.77	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-03 - South Water System Emergency Generator	Diesel	2922	HP	Nitrogen Oxides (NOx)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	4.77	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-04 - Emergency Fire Water Pump	Diesel	920	HP	Nitrogen Oxides (NOx)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	4.77	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-01 - Melt Shop Emergency Generator	Diesel	260	HP	Nitrogen Oxides (NOx)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	2.98	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-02 - Reheat Furnace Emergency Generator	Diesel	190	HP	Nitrogen Oxides (NOx)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	2.98	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-07 - Air Separation Plant Emergency Generator	Diesel	700	HP	Nitrogen Oxides (NOx)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	4.77	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-01 - Caster Emergency Generator	Diesel	2922	HP	Nitrogen Oxides (NOx)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	4.77	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-03 - Rolling Mill Emergency Generator	Diesel	440	HP	Nitrogen Oxides (NOx)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	2.98	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-04 - IT Emergency Generator	Diesel	190	HP	Nitrogen Oxides (NOx)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	2.98	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-05 - Radio Tower Emergency Generator	Diesel	61	HP	Nitrogen Oxides (NOx)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	3.5	G/HP-HR

RBLC Entries for Nitrogen Oxides Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
TX-0888	ORANGE POLYETHYLENE PLANT	TX	155952 PSDTX1556 GHGPSDTX192	4/23/2020	EMERGENCY GENERATORS; FIRE WATER PUMP ENGINES	Ultra-low Sulfur Diesel	0	-	Nitrogen Oxides (NOx)	well-designed and properly maintained engines and each limited to 100 hours per year of non-emergency use.	0	-
*VA-0332	CHICKAHOMINY POWER LLC	VA	52610-1	6/24/2019	Emergency Diesel Generator - 300 kW	Ultra Low Sulfur Diesel	500	H/YR	Nitrogen Oxides (NOx)	good combustion practices, high efficiency design, and the use of ultra low sulfur diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	4.8	G/HP-H
*VA-0332	CHICKAHOMINY POWER LLC	VA	52610-1	6/24/2019	Emegency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Nitrogen Oxides (NOx)	good combustion practices, high efficiency design, and the use of ultra low sulfur diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	3	G/HP-HR
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	One (1) Black Start Generator Engine	ULSD	186.6	gph	Nitrogen Oxides (NOx)	Good combustion practices, limit operation to 500 hours per year.	3.3	G/HP-HR
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Three (3) Firewater Pump Engines and two (2) Emergency Diesel Generators	ULSD	19.4	gph	Nitrogen Oxides (NOx)	Good combustion practices, limit operation to 500 hours per year per engine	3.6	G/HP-HR
*AR-0161	SUN BIO MATERIAL COMPANY	AR	2384-AOP-R0	9/23/2019	Emergency Engines	Diesel	0	-	Nitrogen Oxides (NOx)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.4	G/KW-HR
AR-0163	BIG RIVER STEEL LLC	AR	2305-AOP-R6	6/9/2019	Emergency Engines	Diesel	0	-	Nitrogen Oxides (NOx)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	4.86	G/KW-HR
*LA-0345	DIRECT REDUCED IRON FACILITY	LA	PSD-LA-751(M3)	6/13/2019	IC engines (14 units)	Diesel	0	-	Nitrogen Oxides (NOx)	Comply with requirements of 40 CFR 60 Subpart IIII	0	-
*MI-0445	INDECK NILES, LLC	MI	75-16B	11/26/2019	EUFPENGINE (Emergency engine-diesel fire pump	diesel fuel	1.66	MMBTU/H	Nitrogen Oxides (NOx)	Good Combustion Practices and meeting NSPS Subpart IIII requirements	3	G/BHP-H
*MI-0445	INDECK NILES, LLC	MI	75-16B	11/26/2019	EUEMENGINE (diesel fuel emergency engine)	diesel fuel	22.68	MMBTU/H	Nitrogen Oxides (NOx)	Good Combustion Practices and meeting NSPS Subpart IIII requirements	6.4	G/KW-H
TX-0864	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	TX	N266, PSDTX1542, GHGPSDTX183	9/9/2019	EMERGENCY DIESEL ENGINE	Ultra-low sulfur diesel	0	-	Nitrogen Oxides (NOx)	Tier 4 exhaust emission standards specified at 40 CFR § 1039.101(b)	0	-
TX-0866	PORTLAND CEMENT PRODUCTION PLANT	TX	PSDTX1552, GHGPSDTX189	10/24/2019	EMERGENCY ENGINE	ULTRA LOW S DIESEL	0	-	Nitrogen Oxides (NOx)	best combustion practices, clean fuel	3.5	G/KW HR
TX-0879	MOTIVA PORT ARTHUR TERMINAL	TX	7238 AND PSDTX1548	2/19/2020	Emergency Firewater Engine	Ultra-low sulfur diesel	0	-	Nitrogen Oxides (NOx)	Meeting the requirements of 40 CFR Part 60, Subpart IIII. Firing ultra-low sulfur diesel fuel (no more than 15 ppm sulfur by weight). Limited to 100 hrs/yr of non-emergency operation. Have a non-resettable runtime meter.	0	-
TX-0882	SDSW STEEL MILL	TX	156458, PSDTX1562, AND GHGPSDT	1/17/2020	EMERGENCY ENGINES	DIESEL	0	-	Nitrogen Oxides (NOx)	GOOD COMBUSTION PRACTICES, CLEAN FUEL, 100 HR/YR, ULTRA LOW SULFUR FUEL	0.0092	LB/MMBTU
TX-0886	MONT BELVIEU NGL FRACTIONATION UNIT	TX	106921, N270	3/31/2020	EMERGENCY DIESEL ENGINE	Ultra-low sulfur diesel	0	-	Nitrogen Oxides (NOx)	Limited operating hours, good combustion practices meets NSPS IIII Tier 3 engine	0	-
*AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	Diesel Fired Well Pump	Diesel	2.7	MMBtu/hr	Nitrogen Oxides (NOx)	Good Combustion Practices and Limited Use	4.41	LB/MMBTU
AR-0168	BIG RIVER STEEL LLC	AR	2305-AOP-R7	3/17/2021	Emergency Engines	Diesel	0	-	Nitrogen Oxides (NOx)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	4.86	G/KW-HR
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency Generator Parking Garage	Diesel	0	-	Nitrogen Oxides (NOx)	Use of certified engines, design of engines to include turbocharger and an intercooler/aftercooler, good combustion practices and proper operation and maintenance including certification to applicable federal emission standards	2.37	GRAM
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency GeneratorTelecom Hut & Tower	diesel	0	-	Nitrogen Oxides (NOx)	The use of certified engines, design of engines to include turbocharger and an intercooler/aftercooler, good combustion practices and proper operation and maintenance including certification to applicable federal emission standards	2.83	G
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency Engine PGT Office Building	-	0	-	Nitrogen Oxides (NOx)	The use of certified engines, design of engines to include turbocharger and an intercooler/aftercooler, good combustion practices and proper operation and maintenance including certification to applicable federal emission standards	5.76	GRAM
AR-0173	BIG RIVER STEEL LLC	AR	2445-AOP-R0	1/31/2022	Emergency Engines	Diesel	0	-	Nitrogen Oxides (NOx)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	3.9	G/BHP-HR

RBLC Entries for Carbon Monoxide Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
AK-0083	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT06	1/6/2015	Diesel Fired Well Pump	Diesel	2.7	MMBTU/H	Carbon Monoxide	Limited Operation of 168 hr/yr.	0.95	LB/MMBTU
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Black Start and Emergency Internal Combustion Engines	Diesel	1500	kWe	Carbon Monoxide	Good Combustion Practices	4.38	G/KW-HR
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Fire Pump Diesel Internal Combustion Engines	Diesel	252	hp	Carbon Monoxide	Good Combustion Practices	3.3	G/KW-HR
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Twelve (12) Large ULSD/Natural Gas-Fired Internal Combustion Engines	Diesel and Natural Gas	143.5	MMBtu/hr	Carbon Monoxide	Oxidation Catalyst and Maintain Good Combustion Practices	0.18	G/KW-HR (ULSD)
CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	EMERGENCY FIREWATER PUMP ENGINE	Diesel	288	HP	Carbon Monoxide	EQUIPPED W/ A TURBOCHARGER AND AN INTERCOOLER/AFTERCOOLER	0.447	G/HP-H
FL-0354	LAUDERDALE PLANT	FL	0110037-013-AC	8/25/2015	Emergency fire pump engine, 300 HP	Diesel	29	MMBTU/H	Carbon Monoxide	Low-emitting fuel and certified engine	3.5	G / KWH
FL-0356	OKEECHOBEE CLEAN ENERGY CENTER	FL	0930117-001-AC	3/9/2016	One 422-hp emergency fire pump engine	ULSD	0	-	Carbon Monoxide	Use of clean engine technology	3.5	G / KW-HR
*FL-0363	DANIA BEACH ENERGY CENTER	FL	0110037-017-AC	12/4/2017	Emergency Fire Pump Engine (422 hp)	ULSD	0	-	Carbon Monoxide	Certified engine	3.5	G / KWH
*FL-0367	SHADY HILLS COMBINED CYCLE FACILITY	FL	1010524-001-AC	7/27/2018	Emergency Fire Pump Engine (347 HP)	ULSD	8700	gal/year	Carbon Monoxide	Operate and maintain the engine according to the manufacturer's written instructions	3.5	G/KW-HOUR
IL-0114	CRONUS CHEMICALS, LLC	IL	13060007	9/5/2014	Firewater Pump Engine	distillate fuel oil	373	hp	Carbon Monoxide	Tier IV standards for non-road engines at 40 CFR 1039.102, Table 7.	3.5	G/KW-H
IN-0158	ST. JOSEPH ENEGRY CENTER, LLC	IN	141-31003-00579	12/3/2012	TWO (2) FIREWATER PUMP Diesel ENGINES	Diesel	371	BHP, EACH	Carbon Monoxide	COMBUSTION DESIGN CONTROLS AND USAGE LIMITS	2.6	G/HP-H
IN-0166	INDIANA GASIFICATION, LLC	IN	T147-30464-00060	6/27/2012	THREE (3) FIREWATER PUMP ENGINES	Diesel	575	HORSEPOWER, EACH	Carbon Monoxide	GOOD COMBUSTION PRACTICES AND LIMITED HOURS OF NON-EMERGENCY OPERATION	0	-
IN-0234	GRAIN PROCESSING CORPORATION	IN	027-35177-00046	12/8/2015	EMERGENCY FIRE PUMP ENGINE	DISTILLATE OIL	0	-	Carbon Monoxide	GOOD COMBUSTION PRACTICES	2.01	G/HP-H
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	Caterpillar C18DITA Diesel Engine Generator	No. 2 Distillate Fuel Oil	900	BHP	Carbon Monoxide	Utilize efficient combustion/design technology	1.8	LB/HR
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	Cummins 6BTA 5.9F-1 Diesel Engine Fire Pump	No. 2 Fuel Oil	182	BHP	Carbon Monoxide	Utilize efficient combustion/design technology	0.53	LB/HR
LA-0251	FLOPAM INC. FACILITY	LA	PSD-LA-747(M1)	4/26/2011	Large Generator Engines (17 units)	Diesel	0	-	Carbon Monoxide	No additional control	0.03	LB/H
LA-0251	FLOPAM INC. FACILITY	LA	PSD-LA-747(M1)	4/26/2011	Fire Pump Engines - 2 units	Diesel	444	hp	Carbon Monoxide	Good equipment design and proper combustion practices	0.65	LB/H
LA-0305	LAKE CHARLES METHANOL FACILITY	LA	PSD-LA-803(M1)	6/30/2016	Diesel Engines (Emergency)	Diesel	4023	hp	Carbon Monoxide	Complying with 40 CFR 60 Subpart IIII	0	-
*LA-0306	TOPCHEM POLLOCK, LLC	LA	PSD-LA-815	12/20/2016	Genenerator Engine DEG-16-1 (EQT035)	Diesel	460	horsepower	Carbon Monoxide	Meet NSPS Subpart IIII Limitations and Good Combustion Practices	3.18	LB/H
*LA-0306	TOPCHEM POLLOCK, LLC	LA	PSD-LA-815	12/20/2016	Pump Engines DFP-16-1 (EQT036)	Diesel	225	horsepower	Carbon Monoxide	Meet NSPS Subpart IIII Limitations and Good Combustion Practices	1.55	LB/H
*LA-0306	TOPCHEM POLLOCK, LLC	LA	PSD-LA-815	12/20/2016	Pump Engine DFP-16-2 (EQT037)	Diesel	225	horsepower	Carbon Monoxide	Meet NSPS Subpart IIII Limitations and Good Combustion Practices	1.55	LB/H
LA-0307	MAGNOLIA LNG FACILITY	LA	PSD-LA-792	3/21/2016	Diesel Engines	Diesel	0	-	Carbon Monoxide	Good combustion practices, Use Ultra Low Sulfur Diesel, and comply with 40 CFR 60 Subpart IIII	0	-
LA-0309	BENTELER STEEL TUBE FACILITY	LA	PSD-LA-774(M1)	6/4/2015	Firewater Pump Engines	Diesel	288	hp (each)	Carbon Monoxide	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0309	BENTELER STEEL TUBE FACILITY	LA	PSD-LA-774(M1)	6/4/2015	Emergency Generator Engines	Diesel	2922	hp (each)	Carbon Monoxide	Complying with 40 CFR 60 Subpart IIII	0	-
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DFP1-13 - Diesel Fire Pump Engine (EQT0013)	Diesel	650	horsepower	Carbon Monoxide	Compliance with NSPS Subpart IIII	0.9	LB/HR
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DEG1-13 - Diesel Fired Emergency Generator Engine (EQT0012)	Diesel	1474	horsepower	Carbon Monoxide	Compliance with NSPS Subpart IIII	0.51	LB/HR
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Diesel Firewater pump engines (6 units)	Diesel	425	hp	Carbon Monoxide	Complying with 40 CFR 63 subpart ZZZZ	0	-
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Diesel emergency generator engine - EGEN	Diesel	350	hp	Carbon Monoxide	Complying with 40 CFR 63 subpart ZZZZ	0	-
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 1	Diesel	751	HP	Carbon Monoxide	Compliance with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	4.32	LB/H
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 2	Diesel	751	HP	Carbon Monoxide	Compliance with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	4.32	LB/H
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	firewater pump engines (8 units)	Diesel	460	hp	Carbon Monoxide	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	emergency generator engines (6 units)	Diesel	3353	hp	Carbon Monoxide	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0317	METHANEX - GEISMAR METHANOL PLANT	LA	PSD-LA-761(M4)	12/22/2016	Emergency Generator Engines (4 units)	Diesel	0	-	Carbon Monoxide	Complying with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0	-
LA-0317	METHANEX - GEISMAR METHANOL PLANT	LA	PSD-LA-761(M4)	12/22/2016	Firewater pump Engines (4 units)	Diesel	896	hp (each)	Carbon Monoxide	Complying with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Fire Water Diesel Pump No. 3 Engine	Diesel Fuel	600	hp	Carbon Monoxide	Proper operation and limits on hours operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Fire Water Diesel Pump No. 4 Engine	Diesel Fuel	600	hp	Carbon Monoxide	Proper operation and limits on hours of operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Standby Generator No. 9 Engine	Diesel Fuel	400	hp	Carbon Monoxide	Proper operation and limits on hours of operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39A	Diesel Fuel	375	HP	Carbon Monoxide	Compliance with 40 CFR 60 Subpart IIII	3.5	-
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39B	Diesel Fuel	300	HP	Carbon Monoxide	Compliance with 40 CFR 60 Subpart IIII	3.5	-
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Firewater Pumps	Diesel Fuel	634	kW	Carbon Monoxide	Good Combustion and Operating Practices.	3.7	G/HP-H
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Large Emergency Engines (50kW)	Diesel Fuel	5364	HP	Carbon Monoxide	Good Combustion and Operating Practices.	3.5	G/KW-H

RBLC Entries for Carbon Monoxide Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
MD-0041	CPV ST. CHARLES	MD	PSC CASE NO. 9280	4/23/2014	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	ULTRA-LOW SULFUR Diesel	300	HP	Carbon Monoxide	USE OF Ultra Low Sulfur Diesel AND GOOD COMBUSTION PRACTICES	2.6	G/HP-H
*MD-0042	WILDCAT POINT GENERATION FACILITY	MD	CPCN CASE NO. 9327	4/8/2014	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	Ultra Low Sulfur Diesel	477	HP	Carbon Monoxide	USE OF ULSD FUEL, GOOD COMBUSTION PRACTICES AND HOURS OF OPERATION LIMITED TO 100 HOURS PER YEAR	2.6	G/HP-H
MD-0044	COVE POINT LNG TERMINAL	MD	PSC CASE NO. 9318	6/9/2014	5 EMERGENCY FIRE WATER PUMP ENGINES	Ultra Low Sulfur Diesel	350	HP	Carbon Monoxide	GOOD COMBUSTION PRACTICES AND DESIGNED TO MEET EMISSION LIMIT	3	G/HP-H
MD-0045	MATTAWOMAN ENERGY CENTER	MD	PSC CASE. NO. 9330	11/13/2015	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	ULTRA-LOW SULFUR Diesel	305	HP	Carbon Monoxide	USE OF Ultra Low Sulfur Diesel AND GOOD COMBUSTION PRACTICES	3.5	G/KW-H
MD-0046	KEYS ENERGY CENTER	MD	PSC CASE NO. 9297	10/31/2014	Diesel-FIRED AUXILIARY (EMERGENCY) ENGINES (TWO)	ULTRA-LOW SULFUR Diesel	1500	KW	Carbon Monoxide	EXCLUSIVE USE OF Ultra Low Sulfur FUEL AND GOOD COMBUSTION PRACTICES	3.5	G/KW-H
MD-0046	KEYS ENERGY CENTER	MD	PSC CASE NO. 9297	10/31/2014	Diesel-FIRED FIRE PUMP ENGINE	ULTRA-LOW SULFUR Diesel	300	HP	Carbon Monoxide	EXCLUSIVE USE OF Ultra Low Sulfur Diesel FUEL AND GOOD COMBUSTION PRACTICES	3.5	G/KW-H
MI-0402	SUMPTER POWER PLANT	MI	81-11	11/17/2011	Diesel fuel-fired combustion engine (RICE)	Diesel	732	HP	Carbon Monoxide	Good combustion practices	0.31	G/HP-H
MI-0406	RENAISSANCE POWER LLC	MI	51-13	11/1/2013	FG-EMGEN7-8; Two (2) 1,000kW Diesel-fueled emergency reciprocating internal combustion engines	Diesel	1000	kW	Carbon Monoxide	Good combustion practices.	2.6	G/B-HP-H
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	EU-FPENGINE: Diesel fuel fired emergency backup fire pump	Diesel fuel	315	hp nameplate	Carbon Monoxide	Proper combustion design and Ultra Low Sulfur Diesel fuel.	2.6	G/HP-H
MI-0412	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13	12/4/2013	Emergency Engine --Diesel Fire Pump (EUFPENGINE)	Diesel	165	HP	Carbon Monoxide	Good combustion practices	3.7	G/HP-H
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Emergency Diesel Generator Engine (EUEMRGRICE in FGRICE)	Diesel	500	H/YR	Carbon Monoxide	Good design and combustion practices.	3.5	G/KW-H
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Dieself fire pump engine (EUFIREPUMP in FGRICE)	Diesel	500	H/YR	Carbon Monoxide	Good design and combustion practices.	3.5	G/KW-H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUEMENGINE (Diesel fuel emergency engine)	Diesel Fuel	22.68	MMBTU/H	Carbon Monoxide	Good combustion practices and meeting NSPS Subpart IIII requirements.	3.5	G/KW-H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	1.66	MMBTU/H	Carbon Monoxide	Good combustion practices and meeting NSPS Subpart IIII requirements.	2.6	G/BHP-H
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13C	12/5/2016	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	500	H/YR	Carbon Monoxide	Good combustion practices.	3.7	G/HP-H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE1 in FGRICE (Emergency Diesel generator engine)	Diesel	500	H/YR	Carbon Monoxide	Good design and combustion practices.	3.5	G/KW-H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE2 in FGRICE (Emergency Diesel Generator Engine)	Diesel	500	H/YR	Carbon Monoxide	Good design and combustion practices.	3.5	G/KW-H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUFIREPUMP in FGRICE (Diesel fire pump engine)	Diesel	500	H/YR	Carbon Monoxide	Good design and combustion practices.	3.5	G/KW-H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (South Plant): Fire pump engine	Diesel	300	HP	Carbon Monoxide	Good combustion practices and meeting NSPS Subpart IIII requirements.	2.6	G/BPH-H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (North Plant): Emergency Engine	Diesel	1341	HP	Carbon Monoxide	Good combustion practices and meeting NSPS Subpart IIII requirements.	3.5	G/KW-H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (North Plant): Fire pump engine	Diesel	300	HP	Carbon Monoxide	Good combustion practices and meeting NSPS Subpart IIII requirements.	2.6	G/BHP-H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (South Plant): Emergency Engine	Diesel	1341	HP	Carbon Monoxide	Good combustion practices and meeting NSPS IIII requirements.	3.5	G/KW-H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUEMENGINE: Emergency engine	Diesel	2	MW	Carbon Monoxide	State of the art combustion design.	3.5	G/KW-H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUFPENGINE: Fire pump engine	Diesel	399	BHP	Carbon Monoxide	State of the art combustion design.	3.5	G/KW-H
OH-0345	DP&L J.M. STUART GENERATING STATION	OH	P0106503	8/16/2011	Crusher/screener with 300 HP; 110 HP Diesel engines	Diesel	0	-	Carbon Monoxide	Tier III CARB Certified Diesel Engines	0.8	LB/H
OH-0352	OREGON CLEAN ENERGY CENTER	OH	P0110840	6/18/2013	Emergency fire pump engine	Diesel	300	HP	Carbon Monoxide	Purchased certified to the standards in NSPS Subpart IIII	1.7	LB/H
OH-0360	CARROLL COUNTY ENERGY	OH	P0113762	11/5/2013	Emergency fire pump engine (P004)	Diesel	400	HP	Carbon Monoxide	Purchased certified to the standards in NSPS Subpart IIII	2.3	LB/H
OH-0363	NTE OHIO, LLC	OH	P0116610	11/5/2014	Emergency Fire Pump Engine (P003)	Diesel fuel	260	HP	Carbon Monoxide	Emergency operation only, < 500 hours/year each for maintenance checks and readiness testing designed to meet NSPS Subpart IIII	0.69	LB/H
*OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	OH	P0117655	8/25/2015	Emergency fire pump engine (P004)	Diesel fuel	140	HP	Carbon Monoxide	State-of-the-art combustion design	1.15	LB/H
*OH-0367	SOUTH FIELD ENERGY LLC	OH	P0119495	9/23/2016	Emergency fire pump engine (P004)	Diesel fuel	311	HP	Carbon Monoxide	State-of-the-art combustion design	1.79	LB/H
*OH-0368	PALLAS NITROGEN LLC	OH	P0118959	4/19/2017	Emergency Fire Pump Diesel Engine (P008)	Diesel fuel	460	HP	Carbon Monoxide	Good combustion control and operating practices and engines designed to meet the stands of 40 CFR Part 60, Subpart IIII	2.6	LB/H
*OH-0370	TRUMBULL ENERGY CENTER	OH	P0122331	9/7/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Carbon Monoxide	State-of-the-art combustion design	1.73	LB/H
*OH-0372	OREGON ENERGY CENTER	OH	P0121049	9/27/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Carbon Monoxide	State-of-the-art combustion design	1.73	LB/H
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Generator Engine (P001)	Diesel fuel	2206	HP	Carbon Monoxide	Good combustion design	12.64	LB/H

RBLC Entries for Carbon Monoxide Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Fire Pump Engine (P002)	Diesel fuel	700	HP	Carbon Monoxide	Good combustion design	4.01	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Firewater Pumps (P005 and P006)	Diesel fuel	402	HP	Carbon Monoxide	Certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII and employ good combustion practices per the manufacturer's operating manual	2.31	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Emergency Diesel-fired Generator Engine (P007)	Diesel fuel	3353	HP	Carbon Monoxide	Certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII, shall employ good combustion practices per the manufacturer's operating manual	19.25	LB/H
OK-0154	MOORELAND GENERATING STA	OK	2008-302-C[M-1]PSD	7/2/2013	Diesel-FIRED EMERGENCY GENERATOR ENGINE	Diesel	1341	HP	Carbon Monoxide	COMBUSTION CONTROL.	0.001	LB/HR
OK-0173	CMC STEEL OKLAHOMA	OK	2015-0643-C PSD	1/19/2016	Emergency Diesel Engines	Ultra-low sulfur Diesel	15	ppm by weight sulfur	Carbon Monoxide	The applicant has proposed BACT for the control of CO emissions resulting from the combustion of fuel oil for the emergency generators and fire pump as the use of low sulfur No. 2 fuel oil combined with good combustion practices and limited annual operation.	0	-
SC-0113	PYRAMAX CERAMICS, LLC	SC	0160-0023	2/8/2012	EMERGENCY ENGINE 1 THRU 8	Diesel	29	HP	Carbon Monoxide	PURCHASE OF CERTIFIED ENGINE. HOURS OF OPERATION LIMITED TO 100 HOURS FOR MAINTENANCE AND TESTING.	5.5	GR/KW-H
SC-0113	PYRAMAX CERAMICS, LLC	SC	0160-0023	2/8/2012	FIRE PUMP	Diesel	500	HP	Carbon Monoxide	ENGINES CERTIFIED TO MEET NSPS, SUBPART IIII. HOURS OF OPERATION LIMITED TO 100 HOURS PER YEAR FOR MAINTENANCE AND TESTING.	3.5	GR/KW-H
TX-0799	BEAUMONT TERMINAL	TX	18295, PSDTX1466, GHGPSDTX139	6/8/2016	Fire pump engines	Diesel	0	-	Carbon Monoxide	Equipment specifications and good combustion practices. Operation limited to 100 hours per year.	0.0055	LB/HP-HR
TX-0799	BEAUMONT TERMINAL	TX	18295, PSDTX1466, GHGPSDTX139	6/8/2016	EMERGENCY ENGINES	Diesel	0	-	Carbon Monoxide	Equipment specifications and good combustion practices. Operation limited to 100 hours per year.	0.0068	LB/HP-HR
TX-0822	CEMENT PLANT	TX	7369, PSDTX120M4, AND GHGPSDTX	6/30/2017	Emergency Engine	Diesel	0	-	Carbon Monoxide	GOOD COMBUSTION PRACTICES	4.19	LB/HR
TX-0846	MOTOR VEHICLE ASSEMBLY PLANT	TX	70661, PSDTX1036M1, GHGPSDTX18	9/23/2018	FIRE PUMP Diesel ENGINE	NO 2 Diesel	214	kW	Carbon Monoxide	Meets EPA Tier 4 requirements	3.58	G/KW
WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Diesel Fire Pump Engine (EP16)	Ultra Low Sulfur Diesel	327	hp	Carbon Monoxide	EPA Tier 3 rated	0	-
*VA-0321	BRUNSWICK COUNTY POWER STATION	VA	52404	3/12/2013	Diesel Fire water pump 376 bhp	Diesel	500	h/yr	Carbon Monoxide	Good combustion practices	0.9	G/KW-HR
*VA-0328	C4GT, LLC	VA	52588	4/26/2018	Emergency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Carbon Monoxide	Good combustion practices and the use of Ultra Low Sulfur Diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	2.6	G/HP HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-02 - North Water System Emergency Generator	Diesel	2922	HP	Carbon Monoxide	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	2.61	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-03 - South Water System Emergency Generator	Diesel	2922	HP	Carbon Monoxide	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	2.61	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-04 - Emergency Fire Water Pump	Diesel	920	HP	Carbon Monoxide	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	2.61	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-01 - Melt Shop Emergency Generator	Diesel	260	HP	Carbon Monoxide	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	2.61	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-02 - Reheat Furnace Emergency Generator	Diesel	190	HP	Carbon Monoxide	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	2.61	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-07 - Air Separation Plant Emergency Generator	Diesel	700	HP	Carbon Monoxide	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	2.61	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-01 - Caster Emergency Generator	Diesel	2922	HP	Carbon Monoxide	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	2.61	G/HP-HR
TX-0888	ORANGE POLYETHYLENE PLANT	TX	155952 PSDTX1556 GHGPSDTX192	4/23/2020	EMERGENCY GENERATORS & FIRE WATER PUMP ENGINES	Ultra-low Sulfur Diesel	0	-	Carbon Monoxide	well-designed and properly maintained engines and each limited to 100 hours per year of non-emergency use.	0	-
*VA-0332	CHICKAHOMINY POWER LLC	VA	52610-1	6/24/2019	Emergency Diesel Generator - 300 kW	Ultra Low Sulfur Diesel	500	H/YR	Carbon Monoxide	good combustion practices, high efficiency design, and the use of ultra low sulfur diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	2.6	G/HP-HR
*VA-0332	CHICKAHOMINY POWER LLC	VA	52610-1	6/24/2019	Emegency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Carbon Monoxide	good combustion practices, high efficiency design, and the use of ultra low sulfur diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	2.6	G/HP-HR
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	One (1) Black Start Generator Engine	ULSD	186.6	gph	Carbon Monoxide	Oxidation Catalyst, Good Combustion Practices, and 500 hour limit per year.	3.3	G/HP-HR
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Three (3) Firewater Pump Engines and two (2) Emergency Diesel Generators	ULSD	19.4	gph	Carbon Monoxide	Good combustion practices, limit operation to 500 hours per year per engine	3.3	G/HP-HR
*AR-0161	SUN BIO MATERIAL COMPANY	AR	2384-AOP-R0	9/23/2019	Emergency Engines	Diesel	0	-	Carbon Monoxide	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	3.5	G/KW-HR
AR-0163	BIG RIVER STEEL LLC	AR	2305-AOP-R6	6/9/2019	Emergency Engines	Diesel	0	-	Carbon Monoxide	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	3.5	G/KW-HR
*LA-0345	DIRECT REDUCED IRON FACILITY	LA	PSD-LA-751(M3)	6/13/2019	IC engines (14 units)	Diesel	0	-	Carbon Monoxide	Comply with requirements of 40 CFR 60 Subpart IIII	0	-
*MI-0445	INDECK NILES, LLC	MI	75-16B	11/26/2019	EUFPENGINE (Emergency engine-diesel fire pump	diesel fuel	1.66	MMBTU/H	Carbon Monoxide	Good Combustion Practices and meeting NSPS Subpart IIII requirements	2.6	G/BHP-H
*MI-0445	INDECK NILES, LLC	MI	75-16B	11/26/2019	EUEMENGINE (diesel fuel emergency engine)	diesel fuel	22.68	MMBTU/H	Carbon Monoxide	Good Combustion Practices and meeting NSPS Subpart IIII requirements	3.5	G/KW-H

RBLC Entries for Carbon Monoxide Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
TX-0864	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	TX	N266, PSDTX1542, GHGPSDTX183	9/9/2019	EMERGENCY DIESEL ENGINE	Ultra-low sulfur diesel	0	-	Carbon Monoxide	Tier 4 exhaust emission standards specified at 40 CFR § 1039.101(b)	0	-
TX-0866	PORTLAND CEMENT PRODUCTION PLANT	TX	PSDTX1552, GHGPSDTX189	10/24/2019	EMERGENCY ENGINE	ULTRA LOW S DIESEL	0	-	Carbon Monoxide	best combustion practices, clean fuel	3.5	G/KWHR
LA-0364	FG LA COMPLEX	LA	PSD-LA-812	1/6/2020	Emergency Fire Water Pumps	Diesel Fuel	550	hp	Carbon Monoxide	Compliance with the limitations imposed by 40 CFR 63 Subpart IIII and operating the engine in accordance with the engine manufacturer's instructions and/or written procedures designed to maximize combustion efficiency and minimize fuel usage.	0	-
LA-0364	FG LA COMPLEX	LA	PSD-LA-812	1/6/2020	Emergency Generator Diesel Engines	Diesel Fuel	550	hp	Carbon Monoxide	Compliance with the limitations imposed by 40 CFR 63 Subpart IIII and operating the engine in accordance with the engine manufacturer's instructions and/or written procedures designed to maximize combustion efficiency and minimize fuel usage.	0	-
TX-0882	SDSW STEEL MILL	TX	156458, PSDTX1562, AND GHGPSDT	1/17/2020	EMERGENCY ENGINES	DIESEL	0	-	Carbon Monoxide	GOOD COMBUSTION PRACTICES, CLEAN FUEL, 100 HR/YR, ULTRA LOW SULFUR FUEL	0.0057	LB/MMBTU
TX-0888	ORANGE POLYETHYLENE PLANT	TX	155952 PSDTX1556 GHGPSDTX192	4/23/2020	EMERGENCY GENERATORS; FIRE WATER PUMP ENGINES	Ultra-low Sulfur Diesel	0	-	Carbon Monoxide	well-designed and properly maintained engines and each limited to 100 hours per year of non-emergency use.	0	-
*TX-0889	SWEENY OLD OCEAN FACILITIES	TX	N166M2, PSDTX1566, GHGPSDTX196	8/8/2020	Emergency Generator Engines	Ultra-low sulfur diesel	0	-	Carbon Monoxide	Good combustion practices and limited hours of operation	100	HR/YR
LA-0383	LAKE CHARLES LNG EXPORT TERMINAL	LA	PSD-LA-838	9/3/2020	Emergency Engines (EQT0011 - EQT0016)	Diesel	0	-	Carbon Monoxide	Comply with 40 CFR 60 Subpart IIII	0	-
*AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	Diesel Fired Well Pump	Diesel	2.7	MMBtu/hr	Carbon Monoxide	Good Combustion Practices and Limited Use	0.95	LB/MMBTU
AR-0168	BIG RIVER STEEL LLC	AR	2305-AOP-R7	3/17/2021	Emergency Engines	Diesel	0	-	Carbon Monoxide	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	3.5	G/KW-HR
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency Generator Parking Garage	Diesel	0	-	Carbon Monoxide	The use of certified engines, design of engines to include turbocharger and an intercooler/aftercooler, good combustion practices and proper operation and maintenance including certification to applicable federal emission standards	0.5	G
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency Generator Telecom Hut and Tower	diesel	0	-	Carbon Monoxide	The use of certified engines, design of engines to include turbocharger and an intercooler/aftercooler, good combustion practices and proper operation and maintenance including certification to applicable federal emission standards	0.5	G
AR-0173	BIG RIVER STEEL LLC	AR	2445-AOP-R0	1/31/2022	Emergency Engines	Diesel	0	-	Carbon Monoxide	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.9	G/BHP-HR
*LA-0388	LACC LLC US - ETHYLENE PLANT	LA	PSD-LA-800(M-1)	2/25/2022	Firewater Pump Engine No. 1 and 2	Diesel	575	hp	Carbon Monoxide	Compliance with 40 CFR 60 Subpart IIII	3.97	LB/HR
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUEMGD-emergency engine	diesel fuel	4474.2	KW	Carbon Monoxide	Good combustion practices and will be NSPS compliant.	3.5	G/KW-H
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUFPRICE--A 315 HP diesel fueled emergency engine	Diesel	2.5	MMBTU/H	Carbon Monoxide	Good combustion practices	2.6	G/HP-H

RBLC Entries for Particulate Matter Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
AK-0083	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT06	1/6/2015	Diesel Fired Well Pump	Diesel	2.7	MMBTU/H	Particulate matter, total (TPM10)	Limited Operation of 168 hr/yr.	0.31	LB/MMBTU
AK-0083	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT06	1/6/2015	Diesel Fired Well Pump	Diesel	2.7	MMBTU/H	Particulate matter, total (TPM)	Limited Operation of 168 hr/yr.	0.31	LB/MMBTU
AK-0083	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT06	1/6/2015	Diesel Fired Well Pump	Diesel	2.7	MMBTU/H	Particulate matter, total (TPM2.5)	Limited Operation of 168 hr/yr.	0.31	LB/MMBTU
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Black Start and Emergency Internal Cumbustion Engines	Diesel	1500	kWe	Particulate matter, total (TPM)	Clean Fuel and Good Combustion Practices	0.25	G/KW-HR
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Black Start and Emergency Internal Cumbustion Engines	Diesel	1500	kWe	Particulate matter, total (TPM10)	Clean Fuel and Good Combustion Practices	0.25	G/KW-HR
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Black Start and Emergency Internal Cumbustion Engines	Diesel	1500	kWe	Particulate matter, total (TPM2.5)	Clean Fuel and Good Combustion Practices	0.25	G/KW-HR
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Fire Pump Diesel Internal Combustion Engines	Diesel	252	hp	Particulate matter, total (TPM)	Clean Fuel and Good Combustion Practices	0.19	G/KW-HR
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Fire Pump Diesel Internal Combustion Engines	Diesel	252	hp	Particulate matter, total (TPM10)	Clean Fuel and Good Combustion Practices	0.19	G/KW-HR
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Fire Pump Diesel Internal Combustion Engines	Diesel	252	hp	Particulate matter, total (TPM2.5)	Clean Fuel and Good Combustion Practices	0.19	G/KW-HR
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Twelve (12) Large ULSD/Natural Gas-Fired Internal Combustion Engines	Diesel and Natural Gas	143.5	MMBtu/hr	Particulate matter, total (TPM)	Clean Fuel and Good Combustion Practices	0.29	G/KW-HR (ULSD)
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Twelve (12) Large ULSD/Natural Gas-Fired Internal Combustion Engines	Diesel and Natural Gas	143.5	MMBtu/hr	Particulate matter, filterable (FPM)	Clean Fuel and Good Combustion Practices	0.15	G/KW-HR (ULSD)
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Twelve (12) Large ULSD/Natural Gas-Fired Internal Combustion Engines	Diesel and Natural Gas	143.5	MMBtu/hr	Particulate matter, total (TPM10)	Clean Fuel and Good Combustion Practices	0.29	G/KW-HR (ULSD)
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Twelve (12) Large ULSD/Natural Gas-Fired Internal Combustion Engines	Diesel and Natural Gas	143.5	MMBtu/hr	Particulate matter, filterable (FPM10)	Clean Fuel and Good Combustion Practices	0.15	G/KW-HR (ULSD)
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Twelve (12) Large ULSD/Natural Gas-Fired Internal Combustion Engines	Diesel and Natural Gas	143.5	MMBtu/hr	Particulate matter, total (TPM2.5)	Clean Fuel and Good Combustion Practices	0.29	G/KW-HR (ULSD)
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Twelve (12) Large ULSD/Natural Gas-Fired Internal Combustion Engines	Diesel and Natural Gas	143.5	MMBtu/hr	Particulate matter, filterable (FPM2.5)	Clean Fuel and Good Combustion Practices	0.15	G/KW-HR (ULSD)
CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	EMERGENCY FIREWATER PUMP ENGINE	Diesel	288	HP	Particulate matter, total (TPM)	USE Ultra Low Sulfur FUELNOT TO EXCEED 15 PPMVD FUEL SULFUR, OPERATIONAL LIMIT OF 50 HRS/YR	0	-
CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	EMERGENCY FIREWATER PUMP ENGINE	Diesel	288	HP	Particulate matter, total (TPM10)	USE Ultra Low Sulfur FUEL NOT TO EXCEED 15 PPMVD FUEL SULFUR, OPERATIONAL LIMIT OF 50 HRS/YR	0	-
CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	EMERGENCY IC ENGINE	Diesel	2683	HP	Particulate matter, total (TPM)	USE Ultra Low Sulfur FUEL	0.2	G/KW-H
CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	EMERGENCY IC ENGINE	Diesel	2683	HP	Particulate matter, total (TPM10)	USE Ultra Low Sulfur FUEL	0.2	G/KW-H
CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	EMERGENCY IC ENGINE	Diesel	2683	HP	Particulate matter, total (TPM2.5)	USE Ultra Low Sulfur FUEL	0.2	G/KW-H
CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	EMERGENCY IC ENGINE	Diesel	182	HP	Particulate matter, total (TPM)	USE Ultra Low Sulfur FUEL	0.2	G/KW-H
CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	EMERGENCY IC ENGINE	Diesel	182	HP	Particulate matter, total (TPM10)	USE Ultra Low Sulfur FUEL	0.2	G/KW-H
CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	EMERGENCY IC ENGINE	Diesel	182	HP	Particulate matter, total (TPM2.5)	USE Ultra Low Sulfur FUEL	0.2	G/KW-H
FL-0346	LAUDERDALE PLANT	FL	0110037-011-AC	4/22/2014	Emergency fire pump engine (300 HP)	USLD	29	MMBTU/H	Particulate matter, total (TPM)	Good combustion practice	0.2	GRAM PER HP-HR
FL-0354	LAUDERDALE PLANT	FL	0110037-013-AC	8/25/2015	Emergency fire pump engine, 300 HP	Diesel	29	MMBTU/H	Particulate matter, total (TPM)	Low-emitting fuel and certified engine	0.2	G / KWH
FL-0356	OKEECHOBEE CLEAN ENERGY CENTER	FL	0930117-001-AC	3/9/2016	One 422-hp emergency fire pump engine	ULSD	0	-	Particulate matter, total (TPM)	Use of clean fuel	0.2	G / KW-HR
*FL-0363	DANIA BEACH ENERGY CENTER	FL	0110037-017-AC	12/4/2017	Emergency Fire Pump Engine (422 hp)	ULSD	0	-	Particulate matter, filterable (FPM)	Certified engine	0.2	G / KWH
*FL-0367	SHADY HILLS COMBINED CYCLE FACILITY	FL	1010524-001-AC	7/27/2018	Emergency Fire Pump Engine (347 HP)	ULSD	8700	gal/year	Particulate matter, filterable (FPM)	Operate and maintain the engine according to the manufacturer's written instructions	0.2	G/KW-HOUR
IL-0114	CRONUS CHEMICALS, LLC	IL	13060007	9/5/2014	Firewater Pump Engine	distillate fuel oil	373	hp	Particulate matter, filterable (FPM)	Tier IV standards for non-road engines at 40 CFR 1039.102, Table 7.	0.1	G/KW-H
IL-0114	CRONUS CHEMICALS, LLC	IL	13060007	9/5/2014	Firewater Pump Engine	distillate fuel oil	373	hp	Particulate matter, total (TPM10)	Tier IV standards for non-road engines at 40 CFR 1039.102, Table 7.	0.1	G/KW-H
IL-0114	CRONUS CHEMICALS, LLC	IL	13060007	9/5/2014	Firewater Pump Engine	distillate fuel oil	373	hp	Particulate matter, total (TPM2.5)	Tier IV standards for non-road engines at 40 CFR 1039.102, Table 7.	0.1	G/KW-H
IN-0158	ST. JOSEPH ENEGRY CENTER, LLC	IN	141-31003-00579	12/3/2012	TWO (2) FIREWATER PUMP Diesel ENGINES	Diesel	371	BHP, EACH	Particulate matter, filterable (FPM)	COMBUSTION DESIGN CONTROLS AND USAGE LIMITS	0.15	G/HP-H
IN-0158	ST. JOSEPH ENEGRY CENTER, LLC	IN	141-31003-00579	12/3/2012	TWO (2) FIREWATER PUMP Diesel ENGINES	Diesel	371	BHP, EACH	Particulate matter, filterable (FPM10)	COMBUSTION DESIGN CONTROLS AND USAGE LIMITS	0.15	G/HP-H
IN-0158	ST. JOSEPH ENEGRY CENTER, LLC	IN	141-31003-00579	12/3/2012	TWO (2) FIREWATER PUMP Diesel ENGINES	Diesel	371	BHP, EACH	Particulate matter, filterable (FPM2.5)	COMBUSTION DESIGN CONTROLS AND USAGE LIMITS	0.15	G/HP-H
IN-0166	INDIANA GASIFICATION, LLC	IN	T147-30464-00060	6/27/2012	THREE (3) FIREWATER PUMP ENGINES	Diesel	575	HORSEPOWER, EACH	Particulate matter, filterable (FPM)	USE OF LOW-S Diesel AND LIMITED HOURS OF NON-EMERGENCY OPERATION	15	PPM SULFUR

RBLC Entries for Particulate Matter Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
IN-0166	INDIANA GASIFICATION, LLC	IN	T147-30464-00060	6/27/2012	THREE (3) FIREWATER PUMP ENGINES	Diesel	575	HORSEPOWER, EACH	Particulate matter, total (TPM10)	USE OF LOW-S Diesel AND LIMITED HOURS OF NON-EMERGENCY OPERATION	15	PPM SULFUR
IN-0166	INDIANA GASIFICATION, LLC	IN	T147-30464-00060	6/27/2012	THREE (3) FIREWATER PUMP ENGINES	Diesel	575	HORSEPOWER, EACH	Particulate matter, total (TPM2.5)	USE OF LOW-S Diesel AND LIMITED HOURS OF NON-EMERGENCY OPERATION	15	PPM SULFUR
IN-0234	GRAIN PROCESSING CORPORATION	IN	027-35177-00046	12/8/2015	EMERGENCY FIRE PUMP ENGINE	DISTILLATE OIL	0	-	Particulate matter, filterable (FPM)	GOOD COMBUSTION PRACTICES	0.16	G/HP-H
IN-0234	GRAIN PROCESSING CORPORATION	IN	027-35177-00046	12/8/2015	EMERGENCY FIRE PUMP ENGINE	DISTILLATE OIL	0	-	Particulate matter, total (TPM10)	GOOD COMBUSTION PRACTICES	0.16	G/HP-H
KS-0029	THE EMPIRE DISTRICT ELECTRIC COMPANY	KS	C-12987	7/14/2015	Emergency Diesel engine	Diesel	750	KW	Particulate matter, total (TPM2.5)	Low sulfur fuel oil (<15 ppm sulfur)	0.15	G PER BHP-HR
KS-0029	THE EMPIRE DISTRICT ELECTRIC COMPANY	KS	C-12987	7/14/2015	Emergency Diesel engine	Diesel	750	KW	Particulate matter, total (TPM10)	Low sulfur fuel oil (<15 ppm sulfur)	0.15	G PER BHP-HR
KS-0029	THE EMPIRE DISTRICT ELECTRIC COMPANY	KS	C-12987	7/14/2015	Emergency Diesel engine	Diesel	750	KW	Particulate matter, total (TPM)	Low sulfur fuel oil (<15 ppm sulfur)	0.15	G PER BHP-HR
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	Caterpillar C18DITA Diesel Engine Generator	No. 2 Distillate Fuel Oil	900	BHP	Particulate matter, total (TPM10)	Utilize efficient combustion/design technology	0.066	G/BHP-H
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	Caterpillar C18DITA Diesel Engine Generator	No. 2 Distillate Fuel Oil	900	BHP	Particulate matter, total (TPM)	Utilize efficient combustion/design technology	0.066	G/BHP-H
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	Cummins 6BTA 5.9F-1 Diesel Engine Fire Pump	No. 2 Fuel Oil	182	BHP	Particulate matter, total (TPM10)	Utilize efficient combustion/design technology	0.25	G/BHP-H
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	Cummins 6BTA 5.9F-1 Diesel Engine Fire Pump	No. 2 Fuel Oil	182	BHP	Particulate matter, total (TPM)	Utilize efficient combustion/design technology	0.25	G/BHP-H
LA-0305	LAKE CHARLES METHANOL FACILITY	LA	PSD-LA-803(M1)	6/30/2016	Diesel Engines (Emergency)	Diesel	4023	hp	Particulate matter, total (TPM10)	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0305	LAKE CHARLES METHANOL FACILITY	LA	PSD-LA-803(M1)	6/30/2016	Diesel Engines (Emergency)	Diesel	4023	hp	Particulate matter, total (TPM2.5)	Complying with 40 CFR 60 Subpart IIII	0	-
*LA-0306	TOPCHEM POLLOCK, LLC	LA	PSD-LA-815	12/20/2016	Genenerator Engine DEG-16-1 (EQT035)	Diesel	460	horsepower	Particulate matter, total (TPM2.5)	Meet NSPS Subpart IIII Limitations and Good Combustion Practices	0.18	LB/H
*LA-0306	TOPCHEM POLLOCK, LLC	LA	PSD-LA-815	12/20/2016	Pump Engines DFP-16-1 (EQT036)	Diesel	225	horsepower	Particulate matter, total (TPM2.5)	Meet NSPS Subpart IIII Limitations and Good Combustion Practices	0.09	LB/H
*LA-0306	TOPCHEM POLLOCK, LLC	LA	PSD-LA-815	12/20/2016	Pump Engine DFP-16-2 (EQT037)	Diesel	225	horsepower	Particulate matter, total (TPM2.5)	Meet NSPS Subpart IIII Limitations and Good Combustion Practices	0.09	LB/H
LA-0307	MAGNOLIA LNG FACILITY	LA	PSD-LA-792	3/21/2016	Diesel Engines	Diesel	0	-	Particulate matter, total (TPM2.5)	Good combustion practices, Use Ultra Low Sulfur Diesel, and comply with 40 CFR 60 Subpart IIII	0	-
LA-0307	MAGNOLIA LNG FACILITY	LA	PSD-LA-792	3/21/2016	Diesel Engines	Diesel	0	-	Particulate matter, total (TPM10)	Good combustion practices, Use Ultra Low Sulfur Diesel, and comply with 40 CFR 60 Subpart IIII	0	-
LA-0308	MORGAN CITY POWER PLANT	LA	PSD-LA-767	9/26/2013	2000 KW Diesel Fired Emergency Generator Engine	Diesel	20.4	MMBTU/hr	Particulate matter, filterable (FPM10)	Good combustion and maintenance practices, and compliance with NSPS 40 CFR 60 Subpart IIII	1.06	LB/H
LA-0308	MORGAN CITY POWER PLANT	LA	PSD-LA-767	9/26/2013	2000 KW Diesel Fired Emergency Generator Engine	Diesel	20.4	MMBTU/hr	Particulate matter, filterable (FPM2.5)	Good combustion and maintenance practices, and compliance with NSPS 40 CFR 60 Subpart IIII	1.06	LB/H
LA-0308	MORGAN CITY POWER PLANT	LA	PSD-LA-767	9/26/2013	380 HP Diesel Fired Pump Engine	Diesel	2.3	MMBTU/hr	Particulate matter, total (TPM10)	Good combustion and maintenance practices, and compliance with NSPS 40 CFR 60 Subpart IIII	0.15	LB/H
LA-0308	MORGAN CITY POWER PLANT	LA	PSD-LA-767	9/26/2013	380 HP Diesel Fired Pump Engine	Diesel	2.3	MMBTU/hr	Particulate matter, filterable (FPM2.5)	Good combustion and maintenance practices, and compliance with NSPS 40 CFR 60 Subpart IIII	0.15	LB/H
LA-0309	BENTELER STEEL TUBE FACILITY	LA	PSD-LA-774(M1)	6/4/2015	Firewater Pump Engines	Diesel	288	hp (each)	Particulate matter, total (TPM10)	Complying with 40 CFR 60 Subpart IIII	0.15	G/BHP-HR
LA-0309	BENTELER STEEL TUBE FACILITY	LA	PSD-LA-774(M1)	6/4/2015	Firewater Pump Engines	Diesel	288	hp (each)	Particulate matter, total (TPM2.5)	Complying with 40 CFR 60 Subpart IIII	0.15	G/BHP-HR
LA-0309	BENTELER STEEL TUBE FACILITY	LA	PSD-LA-774(M1)	6/4/2015	Emergency Generator Engines	Diesel	2922	hp (each)	Particulate matter, total (TPM10)	Complying with 40 CFR 60 Subpart IIII	0.2	G/KW-HR
LA-0309	BENTELER STEEL TUBE FACILITY	LA	PSD-LA-774(M1)	6/4/2015	Emergency Generator Engines	Diesel	2922	hp (each)	Particulate matter, total (TPM2.5)	Complying with 40 CFR 60 Subpart IIII	0.2	G/KW-HR
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DFP1-13 - Diesel Fire Pump Engine (EQT0013)	Diesel	650	horsepower	Particulate matter, total (TPM10)	Compliance with NSPS Subpart IIII	0.15	LB/HR
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DFP1-13 - Diesel Fire Pump Engine (EQT0013)	Diesel	650	horsepower	Particulate matter, total (TPM2.5)	Compliance with NSPS IIII	0.15	LB/HR
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DEG1-13 - Diesel Fired Emergency Generator Engine (EQT0012)	Diesel	1474	horsepower	Particulate matter, total (TPM10)	Compliance with NSPS Subpart IIII	0.08	LB/HR
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DEG1-13 - Diesel Fired Emergency Generator Engine (EQT0012)	Diesel	1474	horsepower	Particulate matter, total (TPM2.5)	Compliance with NSPS Subpart IIII	0.08	LB/HR
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Diesel Firewater pump engines (6 units)	Diesel	425	hp	Particulate matter, total (TPM10)	Complying with 40 CFR 63 subpart ZZZZ	0	-
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Diesel Firewater pump engines (6 units)	Diesel	425	hp	Particulate matter, total (TPM2.5)	Complying with 40 CFR 63 subpart ZZZZ	0	-
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Diesel emergency generator engine - EGEN	Diesel	350	hp	Particulate matter, total (TPM10)	Complying with 40 CFR 63 subpart ZZZZ	0	-
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Diesel emergency generator engine - EGEN	Diesel	350	hp	Particulate matter, total (TPM2.5)	Complying with 40 CFR 63 subpart ZZZZ	0	-
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 1	Diesel	751	HP	Particulate matter, total (TPM10)	Proper design and operation; use of ultra-low sulfur Diesel	0.25	LB/H
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 1	Diesel	751	HP	Particulate matter, total (TPM2.5)	Proper design and operation; use of ultra-low sulfur Diesel	0.25	LB/H

RBLC Entries for Particulate Matter Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 2	Diesel	751	HP	Particulate matter, total (TPM10)	Proper design and operation; use of ultra-low sulfur Diesel	0.25	LB/H
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 2	Diesel	751	HP	Particulate matter, total (TPM2.5)	Proper design and operation; use of ultra-low sulfur Diesel	0.25	LB/H
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	firewater pump engines (8 units)	Diesel	460	hp	Particulate matter, total (TPM10)	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	firewater pump engines (8 units)	Diesel	460	hp	Particulate matter, total (TPM2.5)	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	emergency generator engines (6 units)	Diesel	3353	hp	Particulate matter, total (TPM10)	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	emergency generator engines (6 units)	Diesel	3353	hp	Particulate matter, total (TPM2.5)	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0317	METHANEX - GEISMAR METHANOL PLANT	LA	PSD-LA-761(M4)	12/22/2016	Emergency Generator Engines (4 units)	Diesel	0	-	Particulate matter, total (TPM10)	Complying with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0	-
LA-0317	METHANEX - GEISMAR METHANOL PLANT	LA	PSD-LA-761(M4)	12/22/2016	Emergency Generator Engines (4 units)	Diesel	0	-	Particulate matter, total (TPM2.5)	Complying with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0	-
LA-0317	METHANEX - GEISMAR METHANOL PLANT	LA	PSD-LA-761(M4)	12/22/2016	Firewater pump Engines (4 units)	Diesel	896	hp (each)	Particulate matter, total (TPM10)	Complying with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0	-
LA-0317	METHANEX - GEISMAR METHANOL PLANT	LA	PSD-LA-761(M4)	12/22/2016	Firewater pump Engines (4 units)	Diesel	896	hp (each)	Particulate matter, total (TPM2.5)	Complying with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Fire Water Diesel Pump No. 3 Engine	Diesel Fuel	600	hp	Particulate matter, total (TPM10)	Proper operation and limits on hours operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Fire Water Diesel Pump No. 3 Engine	Diesel Fuel	600	hp	Particulate matter, total (TPM2.5)	Proper operation and limits on hours operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Fire Water Diesel Pump No. 4 Engine	Diesel Fuel	600	hp	Particulate matter, total (TPM10)	Proper operation and limits on hours of operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Fire Water Diesel Pump No. 4 Engine	Diesel Fuel	600	hp	Particulate matter, total (TPM2.5)	Proper operation and limits on hours of operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Standby Generator No. 9 Engine	Diesel Fuel	400	hp	Particulate matter, total (TPM10)	Proper operation and limits on hours of operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Standby Generator No. 9 Engine	Diesel Fuel	400	hp	Particulate matter, total (TPM2.5)	Proper operation and limits on hours of operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39A	Diesel Fuel	375	HP	Particulate matter, total (TPM10)	Compliance with 40 CFR 60 Subpart IIII.	0.2	-
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39A	Diesel Fuel	375	HP	Particulate matter, total (TPM2.5)	Compliance with 40 CFR 60 Subpart IIII	0.2	-
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39B	Diesel Fuel	300	HP	Particulate matter, total (TPM10)	Compliance with 40 CFR 60 Subpart IIII	0.2	-
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39B	Diesel Fuel	300	HP	Particulate matter, total (TPM2.5)	Compliance with 40 CFR 60 Subpart III	0.2	-
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Firewater Pumps	Diesel Fuel	634	kW	Particulate matter, total (TPM10)	Good combustion and operating practices.	0.3	G/HP-H
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Firewater Pumps	Diesel Fuel	634	kW	Particulate matter, total (TPM2.5)	Good combustion and operating practices.	0.3	G/HP-H
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Large Emergency Engines (50kW)	Diesel Fuel	5364	HP	Particulate matter, total (TPM10)	Good combustion and operating practices.	0.2	G/KW-H
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Large Emergency Engines (50kW)	Diesel Fuel	5364	HP	Particulate matter, total (TPM2.5)	Good combustion and operating practices.	0.2	G/KW-H
MD-0041	CPV ST. CHARLES	MD	PSC CASE NO. 9280	4/23/2014	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	ULTRA-LOW SULFUR Diesel	300	HP	Particulate matter, filterable (FPM)	EXCLUSIVE USE OF Ultra Low Sulfur FUEL AND GOOD COMBUSTION PRACTICES	0.15	G/HP-H
MD-0041	CPV ST. CHARLES	MD	PSC CASE NO. 9280	4/23/2014	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	ULTRA-LOW SULFUR Diesel	300	HP	Particulate matter, total (TPM10)	EXCLUSIVE USE OF Ultra Low Sulfur FUEL AND GOOD COMBUSTION PRACTICES	0.15	G/HP-H
*MD-0042	WILDCAT POINT GENERATION FACILITY	MD	CPCN CASE NO. 9327	4/8/2014	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	Ultra Low Sulfur Diesel	477	HP	Particulate matter, filterable (FPM)	EXCLUSIVE USE OF ULSD FUEL, GOOD COMBUSTION PRACTICES, LIMITED HOURS OF OPERATION, AND DESIGNED TO ACHIEVE EMISSION LIMITS	0.15	G/HP-H
*MD-0042	WILDCAT POINT GENERATION FACILITY	MD	CPCN CASE NO. 9327	4/8/2014	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	Ultra Low Sulfur Diesel	477	HP	Particulate matter, total (TPM10)	EXCLUSIVE USE OF ULSD FUEL, GOOD COMBUSTION PRACTICES, LIMITED HOURS OF OPERATION, AND DESIGNED TO ACHIEVE EMISSION LIMITS	0.15	G/HP-H
*MD-0042	WILDCAT POINT GENERATION FACILITY	MD	CPCN CASE NO. 9327	4/8/2014	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	Ultra Low Sulfur Diesel	477	HP	Particulate matter, total (TPM2.5)	EXCLUSIVE USE OF ULSD FUEL, GOOD COMBUSTION PRACTICES, LIMITED HOURS OF OPERATION, AND DESIGNED TO ACHIEVE EMISSION LIMITS	0.15	G/HP-H
MD-0043	PERRYMAN GENERATING STATION	MD	PSC CASE NO. 9136	7/1/2014	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	ULTRAL LOW SULFUR Diesel	350	HP	Particulate matter, total (TPM10)	GOOD COMBUSTION PRACTICES, LIMITED HOURS OF OPERATION, AND EXCLUSIVE USE OF ULSD	0.17	G/HP-H
MD-0044	COVE POINT LNG TERMINAL	MD	PSC CASE NO. 9318	6/9/2014	5 EMERGENCY FIRE WATER PUMP ENGINES	Ultra Low Sulfur Diesel	350	HP	Particulate matter, filterable (FPM)	EXCLUSIVE USE OF ULSD FUEL, GOOD COMBUSTION PRACTICES AND DESIGNED TO ACHIEVE EMISSION LIMITS	0.15	G/BHP-H
MD-0044	COVE POINT LNG TERMINAL	MD	PSC CASE NO. 9318	6/9/2014	5 EMERGENCY FIRE WATER PUMP ENGINES	Ultra Low Sulfur Diesel	350	HP	Particulate matter, total (TPM10)	EXCLUSIVE USE OF ULSD FUEL, GOOD COMBUSTION PRACTICES AND DESIGNED TO ACHIEVE EMISSION LIMITS	0.17	G/BHP-H

RBLC Entries for Particulate Matter Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
MD-0044	COVE POINT LNG TERMINAL	MD	PSC CASE NO. 9318	6/9/2014	5 EMERGENCY FIRE WATER PUMP ENGINES	Ultra Low Sulfur Diesel	350	HP	Particulate matter, total (TPM2.5)	EXCLUSIVE USE OF ULSD FUEL, GOOD COMBUSTION PRACTICES AND DESIGNED TO ACHIEVE EMISSION LIMITS	0.17	G/BHP-H
MD-0045	MATTAWOMAN ENERGY CENTER	MD	PSC CASE. NO. 9330	11/13/2015	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	ULTRA-LOW SULFUR Diesel	305	HP	Particulate matter, total (TPM10)	EXCLUSIVE USE OF Ultra Low Sulfur FUEL AND GOOD COMBUSTION PRACTICES.	0.18	G/HP-H
MD-0045	MATTAWOMAN ENERGY CENTER	MD	PSC CASE. NO. 9330	11/13/2015	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	ULTRA-LOW SULFUR Diesel	305	HP	Particulate matter, total (TPM2.5)	EXCLUSIVE USE OF Ultra Low Sulfur FUEL AND GOOD COMBUSTION PRACTICES	0.18	G/HP-H
MD-0045	MATTAWOMAN ENERGY CENTER	MD	PSC CASE. NO. 9330	11/13/2015	EMERGENCY Diesel ENGINE FOR FIRE WATER PUMP	ULTRA-LOW SULFUR Diesel	305	HP	Particulate matter, filterable (FPM)	EXCLUSIVE USE OF Ultra Low Sulfur FUEL AND GOOD COMBUSTION PRACTICES	0.2	G/KW-H
MD-0046	KEYS ENERGY CENTER	MD	PSC CASE NO. 9297	10/31/2014	Diesel-FIRED AUXILIARY (EMERGENCY) ENGINES (TWO)	ULTRA-LOW SULFUR Diesel	1500	KW	Particulate matter, filterable (FPM)	USE OF Ultra Low Sulfur Diesel AND GOOD COMBUSTION PRACTICES	0.2	G/KW-H
MD-0046	KEYS ENERGY CENTER	MD	PSC CASE NO. 9297	10/31/2014	Diesel-FIRED AUXILIARY (EMERGENCY) ENGINES (TWO)	ULTRA-LOW SULFUR Diesel	1500	KW	Particulate matter, total (TPM10)	USE OF Ultra Low Sulfur Diesel AND GOOD COMBUSTION PRACTICES.	0.18	G/HP-H
MD-0046	KEYS ENERGY CENTER	MD	PSC CASE NO. 9297	10/31/2014	Diesel-FIRED FIRE PUMP ENGINE	ULTRA-LOW SULFUR Diesel	300	HP	Particulate matter, filterable (FPM)	EXCLUSIVE USE OF Ultra Low Sulfur Diesel FUEL AND GOOD COMBUSTION PRACTICES	0.2	G/KW-H
MD-0046	KEYS ENERGY CENTER	MD	PSC CASE NO. 9297	10/31/2014	Diesel-FIRED FIRE PUMP ENGINE	ULTRA-LOW SULFUR Diesel	300	HP	Particulate matter, total (TPM10)	EXCLUSIVE USE OF Ultra Low Sulfur Diesel FUEL AND GOOD COMBUSTION PRACTICES	0.18	G/HP-H
MI-0402	SUMPTER POWER PLANT	MI	81-11	11/17/2011	Diesel fuel-fired combustion engine (RICE)	Diesel	732	HP	Particulate matter, filterable (FPM)	Good combustion practices	0.05	G/HP-H
MI-0402	SUMPTER POWER PLANT	MI	81-11	11/17/2011	Diesel fuel-fired combustion engine (RICE)	Diesel	732	HP	Particulate matter, total (TPM10)	Good combustion practices	0.0573	LB/MMBTU
MI-0402	SUMPTER POWER PLANT	MI	81-11	11/17/2011	Diesel fuel-fired combustion engine (RICE)	Diesel	732	HP	Particulate matter, total (TPM2.5)	Good combustion practices	0.0573	LB/MMBTU
MI-0406	RENAISSANCE POWER LLC	MI	51-13	11/1/2013	FG-EMGEN7-8; Two (2) 1,000kW Diesel-fueled emergency reciprocating internal combustion engines	Diesel	1000	kW	Particulate matter, filterable (FPM)	Good combustion practices.	0.15	G/B-HP-H
MI-0406	RENAISSANCE POWER LLC	MI	51-13	11/1/2013	FG-EMGEN7-8; Two (2) 1,000kW Diesel-fueled emergency reciprocating internal combustion engines	Diesel	1000	kW	Particulate matter, total (TPM10)	Good combustion practices.	0.15	G/B-HP-H
MI-0406	RENAISSANCE POWER LLC	MI	51-13	11/1/2013	FG-EMGEN7-8; Two (2) 1,000kW Diesel-fueled emergency reciprocating internal combustion engines	Diesel	1000	kW	Particulate matter, total (TPM2.5)	Good combustion practices	0.15	G/B-HP-H
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	EU-FPENGINE: Diesel fuel fired emergency backup fire pump	Diesel fuel	315	hp nameplate	Particulate matter, filterable (FPM)	Proper combustion design and Ultra Low Sulfur Diesel fuel.	0.15	G/HP-H
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	EU-FPENGINE: Diesel fuel fired emergency backup fire pump	Diesel fuel	315	hp nameplate	Particulate matter, total (TPM10)	Proper combustion design and Ultra Low Sulfur Diesel fuel	0.6	LB/H
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	EU-FPENGINE: Diesel fuel fired emergency backup fire pump	Diesel fuel	315	hp nameplate	Particulate matter, total (TPM2.5)	Proper combustion design and Ultra Low Sulfur Diesel fuel.	0.6	LB/H
MI-0412	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13	12/4/2013	Emergency Engine --Diesel Fire Pump (EUFPENGINE)	Diesel	165	HP	Particulate matter, filterable (FPM)	Good combustion practices	0.22	G/HP-H
MI-0412	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13	12/4/2013	Emergency Engine --Diesel Fire Pump (EUFPENGINE)	Diesel	165	HP	Particulate matter, total (TPM10)	Good combustion practices	0.09	LB/MMBTU
MI-0412	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13	12/4/2013	Emergency Engine --Diesel Fire Pump (EUFPENGINE)	Diesel	165	HP	Particulate matter, total (TPM2.5)	Good combustion practices	0.09	LB/MMBTU
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Emergency Diesel Generator Engine (EUEMRGRICE in FGRICE)	Diesel	500	H/YR	Particulate matter, filterable (FPM)	Certified engines, good design, operation and combustion practices. Operational restrictions/limited use.	1.41	LB/H
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Emergency Diesel Generator Engine (EUEMRGRICE in FGRICE)	Diesel	500	H/YR	Particulate matter, total (TPM10)	Certified engines, good design, operation and combustion practices. Operational restrictions/limited use.	1.41	LB/H
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Emergency Diesel Generator Engine (EUEMRGRICE in FGRICE)	Diesel	500	H/YR	Particulate matter, total (TPM2.5)	Certified engines, good design, operation and combustion practices. Operational restrictions/limited use.	1.41	LB/H
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Dieself fire pump engine (EUFIREPUMP in FGRICE)	Diesel	500	H/YR	Particulate matter, filterable (FPM)	Certified engines, good design, operation and combustion practices. Operational restrictions/limited use.	0.18	LB/H
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Dieself fire pump engine (EUFIREPUMP in FGRICE)	Diesel	500	H/YR	Particulate matter, total (TPM10)	Certified engines. Good design, operation and combustion practices. Operational restrictions/limited use.	0.18	LB/H
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Dieself fire pump engine (EUFIREPUMP in FGRICE)	Diesel	500	H/YR	Particulate matter, total (TPM2.5)	Certified engines. Good design, operation and combustion practices. Operational restrictions/limited use.	0.18	LB/H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUEMENGINE (Diesel fuel emergency engine)	Diesel Fuel	22.68	MMBTU/H	Particulate matter, filterable (FPM)	Good combustion practices and meeting NSPS Subpart IIII requirements.	0.2	G/KW-H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUEMENGINE (Diesel fuel emergency engine)	Diesel Fuel	22.68	MMBTU/H	Particulate matter, total (TPM10)	Good combustion practices.	1.58	LB/H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUEMENGINE (Diesel fuel emergency engine)	Diesel Fuel	22.68	MMBTU/H	Particulate matter, total (TPM2.5)	Good combustion practices.	1.58	LB/H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	1.66	MMBTU/H	Particulate matter, filterable (FPM)	Good combustion practices and meeting NSPS Subpart IIII requirements.	0.15	G/BHP-H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	1.66	MMBTU/H	Particulate matter, total (TPM10)	Good combustion practices	0.57	LB/H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	1.66	MMBTU/H	Particulate matter, total (TPM2.5)	Good combustion practices	0.57	LB/H

RBLC Entries for Particulate Matter Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13C	12/5/2016	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	500	H/YR	Particulate matter, filterable (FPM)	Good combustion practices.	0.22	G/HP-H
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13C	12/5/2016	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	500	H/YR	Particulate matter, total (TPM10)	Good combustion practices.	0.09	LB/MMBTU
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13C	12/5/2016	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	500	H/YR	Particulate matter, total (TPM2.5)	Good combustion practices.	0.09	LB/MMBTU
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE1 in FGRICE (Emergency Diesel generator engine)	Diesel	500	H/YR	Particulate matter, filterable (FPM)	Certified engines, good design, operation and combustion practices. Operational restrictions/limited use.	0.66	LB/H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE1 in FGRICE (Emergency Diesel generator engine)	Diesel	500	H/YR	Particulate matter, total (TPM10)	Certified engines, good design, operation and combustion practices. Operational restrictions/limited use.	0.66	LB/H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE1 in FGRICE (Emergency Diesel generator engine)	Diesel	500	H/YR	Particulate matter, total (TPM2.5)	Certified engines, good design, operation and combustion practices. Operational restrictions/limited use.	0.66	LB/H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE2 in FGRICE (Emergency Diesel Generator Engine)	Diesel	500	H/YR	Particulate matter, filterable (FPM)	Certified engines, good design, operation and combustion practices. Operational restrictions/limited use.	0.22	LB/H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE2 in FGRICE (Emergency Diesel Generator Engine)	Diesel	500	H/YR	Particulate matter, total (TPM10)	Certified engines. Good design, operation and combustion practices. Operational restrictions/limited use.	0.22	LB/H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE2 in FGRICE (Emergency Diesel Generator Engine)	Diesel	500	H/YR	Particulate matter, total (TPM2.5)	Certified engines. Good design, operation and combustion practices. Operational restrictions/limited use.	0.22	LB/H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUFIREPUMP in FGRICE (Diesel fire pump engine)	Diesel	500	H/YR	Particulate matter, filterable (FPM)	Certified engines. Good design, operation and combustion practices. Operational restrictions/limited use.	0.18	LB/H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUFIREPUMP in FGRICE (Diesel fire pump engine)	Diesel	500	H/YR	Particulate matter, total (TPM10)	Certified engines. Good design, operation and combustion practices. Operational restrictions/limited use.	0.18	LB/H
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUFIREPUMP in FGRICE (Diesel fire pump engine)	Diesel	500	H/YR	Particulate matter, total (TPM2.5)	Certified engines. Good design, operation and combustion practices. Operational restrictions/limited use.	0.18	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (South Plant): Fire pump engine	Diesel	300	HP	Particulate matter, filterable (FPM)	Diesel particulate filter, good combustion practices and meeting NSPS Subpart IIII requirements.	0.15	G/BHP-H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (South Plant): Fire pump engine	Diesel	300	HP	Particulate matter, total (TPM10)	Diesel particulate filter, good combustion practices and meeting NSPS Subpart IIII requirements.	0.66	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (South Plant): Fire pump engine	Diesel	300	HP	Particulate matter, total (TPM2.5)	Diesel particulate filter, good combustion practices and meeting NSPS Subpart IIII requirements.	0.66	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (North Plant): Emergency Engine	Diesel	1341	HP	Particulate matter, filterable (FPM)	Diesel particulate filter, good combustion practices and meeting NSPS Subpart IIII requirements.	0.2	G/KW-H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (North Plant): Emergency Engine	Diesel	1341	HP	Particulate matter, total (TPM10)	Diesel particulate filter, good combustion practices and meeting NSPS Subpart IIII requirements.	0.54	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (North Plant): Emergency Engine	Diesel	1341	HP	Particulate matter, total (TPM2.5)	Diesel particulate filter, good combustion practices and meeting NSPS Subpart IIII requirements.	0.52	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (North Plant): Fire pump engine	Diesel	300	HP	Particulate matter, filterable (FPM)	Diesel particulate filter, good combustion practices and meeting NSPS Subpart IIII requirements.	0.15	G/BHP-H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (North Plant): Fire pump engine	Diesel	300	HP	Particulate matter, total (TPM10)	Diesel particulate filter, good combustion practices and meeting NSPS Subpart IIII requirements.	0.66	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (North Plant): Fire pump engine	Diesel	300	HP	Particulate matter, total (TPM2.5)	Diesel particulate filter, good combustion practices and meeting NSPS Subpart IIII requirements.	0.66	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (South Plant): Emergency Engine	Diesel	1341	HP	Particulate matter, filterable (FPM)	Diesel particulate filter, good combustion practices and meeting NSPS IIII requirements.	0.2	G/KW-H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (South Plant): Emergency Engine	Diesel	1341	HP	Particulate matter, total (TPM10)	Diesel particulate filter, good combustion practices and meeting NSPS Subpart IIII requirements.	0.54	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (South Plant): Emergency Engine	Diesel	1341	HP	Particulate matter, total (TPM2.5)	Diesel particulate filter, good combustion practices and meeting NSPS Subpart IIII requirements.	0.52	LB/H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUEMENGINE: Emergency engine	Diesel	2	MW	Particulate matter, filterable (FPM)	State of the art combustion design	0.2	G/KW-H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUEMENGINE: Emergency engine	Diesel	2	MW	Particulate matter, total (TPM10)	State of the art combustion design	1.18	LB/H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUEMENGINE: Emergency engine	Diesel	2	MW	Particulate matter, total (TPM2.5)	State of the art combustion design.	1.18	LB/H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUFPENGINE: Fire pump engine	Diesel	399	BHP	Particulate matter, filterable (FPM)	State of the art combustion design	0.2	G/KW-H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUFPENGINE: Fire pump engine	Diesel	399	BHP	Particulate matter, total (TPM10)	State of the art combustion design.	0.13	LB/H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUFPENGINE: Fire pump engine	Diesel	399	BHP	Particulate matter, total (TPM2.5)	State of the art combustion design.	0.13	LB/H
MO-0089	OWENS CORNING INSULATION SYSTEMS, LLC	MO	052016-003	5/12/2016	emergency engines	ULSD	0	-	Particulate matter, filterable (FPM)	Good operating practices	0	G/KW
OH-0345	DP&L J.M. STUART GENERATING STATION	OH	P0106503	8/16/2011	Crusher/screener with 300 HP; 110 HP Diesel engines	Diesel	0	-	Particulate matter, filterable (FPM10)	Tier III CARB Certified Diesel Engines	0.11	LB/H
OH-0345	DP&L J.M. STUART GENERATING STATION	OH	P0106503	8/16/2011	Crusher/screener with 300 HP; 110 HP Diesel engines	Diesel	0	-	Particulate matter, filterable (FPM)	Tier III CARB Certified Diesel Engines	0.11	LB/H
OH-0345	DP&L J.M. STUART GENERATING STATION	OH	P0106503	8/16/2011	Crusher/screener with 300 HP; 110 HP Diesel engines	Diesel	0	-	Particulate matter, filterable (FPM2.5)	Tier III CARB certified Diesel engines	0.11	LB/H
OH-0352	OREGON CLEAN ENERGY CENTER	OH	P0110840	6/18/2013	Emergency fire pump engine	Diesel	300	HP	Particulate matter, total (TPM10)	Purchased certified to the standards in NSPS Subpart IIII	0.1	LB/H
OH-0360	CARROLL COUNTY ENERGY	OH	P0113762	11/5/2013	Emergency fire pump engine (P004)	Diesel	400	HP	Particulate matter, total (TPM10)	Purchased certified to the standards in NSPS Subpart IIII	0.131	LB/H

RBLC Entries for Particulate Matter Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
OH-0360	CARROLL COUNTY ENERGY	OH	P0113762	11/5/2013	Emergency fire pump engine (P004)	Diesel	400	HP	Particulate matter, total (TPM2.5)	Purchased certified to the standards in NSPS Subpart IIII	0.131	LB/H
OH-0363	NTE OHIO, LLC	OH	P0116610	11/5/2014	Emergency Fire Pump Engine (P003)	Diesel fuel	260	HP	Particulate matter, total (TPM)	Emergency operation only, < 500 hours/year each for maintenance checks and readiness testing designed to meet NSPS Subpart IIII	0.09	LB/H
OH-0363	NTE OHIO, LLC	OH	P0116610	11/5/2014	Emergency Fire Pump Engine (P003)	Diesel fuel	260	HP	Particulate matter, total (TPM10)	Emergency operation only, < 500 hours/year each for maintenance checks and readiness testing designed to meet NSPS Subpart IIII	0.09	LB/H
OH-0363	NTE OHIO, LLC	OH	P0116610	11/5/2014	Emergency Fire Pump Engine (P003)	Diesel fuel	260	HP	Particulate matter, total (TPM2.5)	Emergency operation only, < 500 hours/year each for maintenance checks and readiness testing designed to meet NSPS Subpart IIII	0.09	LB/H
*OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	OH	P0117655	8/25/2015	Emergency fire pump engine (P004)	Diesel fuel	140	HP	Particulate matter, total (TPM10)	State-of-the-art combustion design	0.07	LB/H
*OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	OH	P0117655	8/25/2015	Emergency fire pump engine (P004)	Diesel fuel	140	HP	Particulate matter, total (TPM2.5)	State-of-the-art combustion design	0.07	LB/H
*OH-0367	SOUTH FIELD ENERGY LLC	OH	P0119495	9/23/2016	Emergency fire pump engine (P004)	Diesel fuel	311	HP	Particulate matter, total (TPM10)	State-of-the-art combustion design	0.1	LB/H
*OH-0367	SOUTH FIELD ENERGY LLC	OH	P0119495	9/23/2016	Emergency fire pump engine (P004)	Diesel fuel	311	HP	Particulate matter, total (TPM2.5)	State-of-the-art combustion design	0.1	LB/H
*OH-0368	PALLAS NITROGEN LLC	OH	P0118959	4/19/2017	Emergency Fire Pump Diesel Engine (P008)	Diesel fuel	460	HP	Particulate matter, total (TPM10)	Good combustion control and operating practices and engines designed to meet the stands of 40 CFR Part 60, Subpart IIII	0.02	LB/H
*OH-0368	PALLAS NITROGEN LLC	OH	P0118959	4/19/2017	Emergency Fire Pump Diesel Engine (P008)	Diesel fuel	460	HP	Particulate matter, total (TPM2.5)	Good combustion control and operating practices and engines designed to meet the stands of 40 CFR Part 60, Subpart IIII	0.02	LB/H
*OH-0370	TRUMBULL ENERGY CENTER	OH	P0122331	9/7/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Particulate matter, total (TPM10)	Ultra Low Sulfur Diesel fuel	0.1	LB/H
*OH-0370	TRUMBULL ENERGY CENTER	OH	P0122331	9/7/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Particulate matter, total (TPM2.5)	Ultra Low Sulfur Diesel fuel	0.1	LB/H
*OH-0372	OREGON ENERGY CENTER	OH	P0121049	9/27/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Particulate matter, total (TPM10)	Ultra Low Sulfur Diesel fuel	0.1	LB/H
*OH-0372	OREGON ENERGY CENTER	OH	P0121049	9/27/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Particulate matter, total (TPM2.5)	Ultra Low Sulfur Diesel fuel	0.1	LB/H
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Generator Engine (P001)	Diesel fuel	2206	HP	Particulate matter, total (TPM)	Good combustion design	0.73	LB/H
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Generator Engine (P001)	Diesel fuel	2206	HP	Particulate matter, total (TPM10)	Good combustion design	0.73	LB/H
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Generator Engine (P001)	Diesel fuel	2206	HP	Particulate matter, total (TPM2.5)	Good combustion design	0.73	LB/H
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Fire Pump Engine (P002)	Diesel fuel	700	HP	Particulate matter, total (TPM)	Good combustion design	0.23	LB/H
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Fire Pump Engine (P002)	Diesel fuel	700	HP	Particulate matter, total (TPM10)	Good combustion design	0.23	LB/H
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Fire Pump Engine (P002)	Diesel fuel	700	HP	Particulate matter, total (TPM2.5)	Good combustion design	0.23	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Firewater Pumps (P005 and P006)	Diesel fuel	402	HP	Particulate matter, total (TPM)	Certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII and employ good combustion practices per the manufacturer's operating manual	0.13	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Firewater Pumps (P005 and P006)	Diesel fuel	402	HP	Particulate matter, total (TPM10)	Certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII and employ good combustion practices per the manufacturer's operating manual	0.13	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Firewater Pumps (P005 and P006)	Diesel fuel	402	HP	Particulate matter, total (TPM2.5)	Certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII and employ good combustion practices per the manufacturer's operating manual	0.13	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Emergency Diesel-fired Generator Engine (P007)	Diesel fuel	3353	HP	Particulate matter, total (TPM)	Certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII, shall employ good combustion practices per the manufacturer's operating manual	1.1	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Emergency Diesel-fired Generator Engine (P007)	Diesel fuel	3353	HP	Particulate matter, total (TPM10)	Certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII, shall employ good combustion practices per the manufacturer's operating manual	1.1	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Emergency Diesel-fired Generator Engine (P007)	Diesel fuel	3353	HP	Particulate matter, total (TPM2.5)	Certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII, shall employ good combustion practices per the manufacturer's operating manual	1.1	LB/H
OK-0154	MOORELAND GENERATING STA	OK	2008-302-C(M-1)PSD	7/2/2013	Diesel-FIRED EMERGENCY GENERATOR ENGINE	Diesel	1341	HP	Particulate matter, total (TPM2.5)	COMBUSTION CONTROL.	0.44	LB/HR

RBLC Entries for Particulate Matter Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
OK-0173	CMC STEEL OKLAHOMA	OK	2015-0643-C PSD	1/19/2016	Emergency Diesel Engines	Ultra-low sulfur Diesel	15	ppm by weight sulfur	Particulate matter, total (TPM10)	The applicant has proposed BACT for the control of PM10 emissions resulting from the combustion of fuel oil for the emergency generators and fire pump as the use of low sulfur No. 2 fuel oil combined with good combustion practices and limited annual operation.	0	-
TX-0822	CEMENT PLANT	TX	7369, PSDTX120M4, AND GHGPSDTX	6/30/2017	Emergency Engine	Diesel	0	-	Particulate matter, total (TPM)	GOOD COMBUSTION PRACTICES	0.02	LB/HR
TX-0822	CEMENT PLANT	TX	7369, PSDTX120M4, AND GHGPSDTX	6/30/2017	Emergency Engine	Diesel	0	-	Particulate matter, total (TPM10)	GOOD COMBUSTION PRACTICES	0.02	LB/HR
TX-0822	CEMENT PLANT	TX	7369, PSDTX120M4, AND GHGPSDTX	6/30/2017	Emergency Engine	Diesel	0	-	Particulate matter, total (TPM2.5)	GOOD COMBUSTION PRACTICES	0.02	LB/HR
TX-0846	MOTOR VEHICLE ASSEMBLY PLANT	TX	70661, PSDTX1036M1, GHGPSDTX18	9/23/2018	FIRE PUMP Diesel ENGINE	NO 2 Diesel	214	kW	Particulate matter, total (TPM10)	Meets EPA Tier 4 requirements	0.02	G/KW
TX-0846	MOTOR VEHICLE ASSEMBLY PLANT	TX	70661, PSDTX1036M1, GHGPSDTX18	9/23/2018	FIRE PUMP Diesel ENGINE	NO 2 Diesel	214	kW	Particulate matter, total (TPM2.5)	Meets EPA Tier 4 requirements	0.02	G/KW
VA-0319	GATEWAY COGENERATION 1, LLC - SMART WATER PROJECT	VA	52375-002	8/27/2012	FIRE WATER PUMP	Diesel (Ultra Low Sulfur)	1.86	MMBTU/H	Particulate matter, total (TPM10)	Clean burning ULSD fuel and good combusion practices	0.15	G/HP-H
VA-0319	GATEWAY COGENERATION 1, LLC - SMART WATER PROJECT	VA	52375-002	8/27/2012	FIRE WATER PUMP	Diesel (Ultra Low Sulfur)	1.86	MMBTU/H	Particulate matter, total (TPM2.5)	Clean burning ULSD fuel and good combustion practices.	0.15	G/HP-H
*VA-0328	C4GT, LLC	VA	52588	4/26/2018	Emergency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Particulate matter, total (TPM10)	Good combustion practices and the use of Ultra Low Sulfur Diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	0.15	G/HP HR
*VA-0328	C4GT, LLC	VA	52588	4/26/2018	Emergency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Particulate matter, total (TPM2.5)	Good combustion practices and the use of Ultra Low Sulfur Diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	0.15	G/HP HR
*VA-0328	C4GT, LLC	VA	52588	4/26/2018	Emergency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Particulate matter, filterable (FPM)	Good combustion practices and the use of Ultra Low Sulfur Diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	15	G/HP/HR
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	One (1) Black Start Generator Engine	ULSD	186.6	gph	Particulate matter, total (TPM10)	Good combustion practices, ULSD, and limit operation to 500 hours per year.	0.045	G/HP-HR
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	One (1) Black Start Generator Engine	ULSD	186.6	gph	Particulate matter, total (TPM2.5)	Good combustion practices, ULSD, and limit operation to 500 hours per year.	0.045	G/HP-HR
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Three (3) Firewater Pump Engines and two (2) Emergency Diesel Generators	ULSD	19.4	gph	Particulate matter, total (TPM10)	Good combustion practices, ULSD, and limit operation to 500 hours per year per engine	0.19	G/HP-HR
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Three (3) Firewater Pump Engines and two (2) Emergency Diesel Generators	ULSD	19.4	gph	Particulate matter, total (TPM2.5)	Good combustion practices, ULSD, and limit operation to 500 hours per year per engine	0.19	G/HP-HR
*AR-0161	SUN BIO MATERIAL COMPANY	AR	2384-AOP-R0	9/23/2019	Emergency Engines	Diesel	0	-	Particulate matter, total (TPM10)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.02	G/KW-HR
*AR-0161	SUN BIO MATERIAL COMPANY	AR	2384-AOP-R0	9/23/2019	Emergency Engines	Diesel	0	-	Particulate matter, total (TPM2.5)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.02	G/KW-HR
AR-0163	BIG RIVER STEEL LLC	AR	2305-AOP-R6	6/9/2019	Emergency Engines	Diesel	0	-	Particulate matter, total (TPM10)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.2	G/KW-HR
AR-0163	BIG RIVER STEEL LLC	AR	2305-AOP-R6	6/9/2019	Emergency Engines	Diesel	0	-	Particulate matter, total (TPM2.5)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.2	G/KW-HR
*LA-0345	DIRECT REDUCED IRON FACILITY	LA	PSD-LA-751(M3)	6/13/2019	IC engines (14 units)	Diesel	0	-	Particulate matter, total (TPM10)	Comply with requirements of 40 CFR 60 Subpart IIII	0	-
*LA-0345	DIRECT REDUCED IRON FACILITY	LA	PSD-LA-751(M3)	6/13/2019	IC engines (14 units)	Diesel	0	-	Particulate matter, total (TPM2.5)	Comply with requirements of 40 CFR 60 Subpart IIII	0	-
*MI-0442	THOMAS TOWNSHIP ENERGY, LLC	MI	210-18	8/21/2019	FGEMENGINE	Diesel	1100	KW	Particulate matter, total (TPM10)	Good combustion practices and ultra low sulfur diesel	7.85	LB/1000 GAL
*MI-0442	THOMAS TOWNSHIP ENERGY, LLC	MI	210-18	8/21/2019	FGEMENGINE	Diesel	1100	KW	Particulate matter, total (TPM2.5)	Good combustion practices and ultra low sulfur diesel.	7.55	LB/1000 GAL
*MI-0445	INDECK NILES, LLC	MI	75-16B	11/26/2019	EUFPENGINE (Emergency engine-diesel fire pump	diesel fuel	1.66	MMBTU/H	Particulate matter, total (TPM10)	Good combustion practices	0.57	LB/H
*MI-0445	INDECK NILES, LLC	MI	75-16B	11/26/2019	EUFPENGINE (Emergency engine-diesel fire pump	diesel fuel	1.66	MMBTU/H	Particulate matter, total (TPM2.5)	Good combustion practices	0.57	LB/H
*MI-0445	INDECK NILES, LLC	MI	75-16B	11/26/2019	EUEMENGINE (diesel fuel emergency engine)	diesel fuel	22.68	MMBTU/H	Particulate matter, total (TPM10)	Good combustion practices	1.58	LB/H
*MI-0445	INDECK NILES, LLC	MI	75-16B	11/26/2019	EUEMENGINE (diesel fuel emergency engine)	diesel fuel	22.68	MMBTU/H	Particulate matter, total (TPM2.5)	Good combustion practices	1.58	LB/H
TX-0864	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	TX	N266, PSDTX1542, GHGPSDTX183	9/9/2019	EMERGENCY DIESEL ENGINE	Ultra-low sulfur diesel	0	-	Particulate matter, total (TPM10)	Tier 4 exhaust emission standards specified at 40 CFR § 1039.101(b)	0	-
TX-0888	ORANGE POLYETHYLENE PLANT	TX	155952 PSDTX1556 GHGPSDTX192	4/23/2020	EMERGENCY GENERATORS & FIRE WATER PUMP ENGINES	Ultra-low Sulfur Diesel	0	-	Particulate matter, total (TPM2.5)	well-designed and properly maintained engines and each limited to 100 hours per year of non-emergency use.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-04 - Emergency Fire Water Pump	Diesel	920	HP	Particulate matter, total (TPM10)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0.15	G/HP-HR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-04 - Emergency Fire Water Pump	Diesel	920	HP	Particulate matter, total (TPM2.5)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0.15	G/HP-HR

RBLC Entries for Particulate Matter Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*VA-0332	CHICKAHOMINY POWER LLC	VA	52610-1	6/24/2019	Emegency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Particulate matter, total (TPM10)	good combustion practices, high efficiency design, and the use of ultra low sulfur diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	0.15	G/HP-HR
*VA-0332	CHICKAHOMINY POWER LLC	VA	52610-1	6/24/2019	Emegency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Particulate matter, total (TPM2.5)	good combustion practices, high efficiency design, and the use of ultra low sulfur diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	0.15	G/HP-HR
*AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	Diesel Fired Well Pump	Diesel	2.7	MMBtu/hr	Particulate matter, total (TPM)	Good Combustion Practices and Limited Use	0.31	LB/MMBTU
*AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	Diesel Fired Well Pump	Diesel	2.7	MMBtu/hr	Particulate matter, (TPM10)	Good Combustion Practices and Limited Use	0.31	LB/MMBTU
*AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	Diesel Fired Well Pump	Diesel	2.7	MMBtu/hr	Particulate matter, total (TPM2.5)	Good Combustion Practices and Limited Use	0.31	LB/MMBTU
AR-0168	BIG RIVER STEEL LLC	AR	2305-AOP-R7	3/17/2021	Emergency Engines	Diesel	-	-	Particulate matter, total (TPM)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.2	G/KW-HR
AR-0168	BIG RIVER STEEL LLC	AR	2305-AOP-R7	3/17/2021	Emergency Engines	Diesel	-	-	Particulate matter, (TPM10)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.2	G/KW-HR
AR-0168	BIG RIVER STEEL LLC	AR	2305-AOP-R7	3/17/2021	Emergency Engines	Diesel	-	-	Particulate matter, total (TPM2.5)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.2	G/KW-HR
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency Generator Parking Garage	Diesel	-	-	Particulate matter, total (TPM2.5)	LAER PM2.5 BACT PM/PM25 certified engines,include trubocharger and intercooler/aftercooler GCP ULSD	0.06	G
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency GeneratorTelecom Hut & Tower	diesel	-	-	Particulate matter, total (TPM2.5)	LAER PM2.5 BACT PM/PM25 certified engines,include trubocharger and intercooler/aftercooler GCP ULSD	0.22	G
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency Engine PGT Office Building	-	-	-	Particulate matter, total (TPM)	Low carbon fuel (NG), Good Combustion Practices proper operation and maintenance	0.0194	LB
AR-0173	BIG RIVER STEEL LLC	AR	2445-AOP-R0	1/31/2022	Emergency Engines	Diesel	-	-	Particulate matter, filterable (FPM)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.1	G/BHP-HR
AR-0173	BIG RIVER STEEL LLC	AR	2445-AOP-R0	1/31/2022	Emergency Engines	Diesel	-	-	Particulate matter, total (TPM10)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.1	G/BHP-HR
AR-0173	BIG RIVER STEEL LLC	AR	2445-AOP-R0	1/31/2022	Emergency Engines	Diesel	-	-	Particulate matter, total (TPM2.5)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.1	G/BHP-HR
*LA-0388	LACC LLC US - ETHYLENE PLANT	LA	PSD-LA-800(M-1)	2/25/2022	Firewater Pump Engine No. 1 and 2	Diesel	575	hp	Particulate matter, total (TPM10)	Compliance with 40 CFR 60 Subpart IIII	0.23	LB/HR
*LA-0388	LACC LLC US - ETHYLENE PLANT	LA	PSD-LA-800(M-1)	2/25/2022	Firewater Pump Engine No. 1 and 2	Diesel	575	hp	Particulate matter, total (TPM2.5)	Compliance with 40 CFR 60 Subpart IIII	0.23	LB/HR
AR-0173	BIG RIVER STEEL LLC	AR	2445-AOP-R0	1/31/2022	Emergency Engines	Diesel	0	-	Particulate matter, filterable (FPM)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.1	G/BHP-HR
AR-0173	BIG RIVER STEEL LLC	AR	2445-AOP-R0	1/31/2022	Emergency Engines	Diesel	0	-	Particulate matter, total (TPM10)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.1	G/BHP-HR
AR-0173	BIG RIVER STEEL LLC	AR	2445-AOP-R0	1/31/2022	Emergency Engines	Diesel	0	-	Particulate matter, total (TPM2.5)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.1	G/BHP-HR
*LA-0388	LACC LLC US - ETHYLENE PLANT	LA	PSD-LA-800(M-1)	2/25/2022	Firewater Pump Engine No. 1 and 2	Diesel	575	hp	Particulate matter, total (TPM10)	Compliance with 40 CFR 60 Subpart IIII	0.23	LB/HR
*LA-0388	LACC LLC US - ETHYLENE PLANT	LA	PSD-LA-800(M-1)	2/25/2022	Firewater Pump Engine No. 1 and 2	Diesel	575	hp	Particulate matter, total (TPM2.5)	Compliance with 40 CFR 60 Subpart IIII	0.23	LB/HR
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUEMGD--emergency engine	diesel fuel	4474.2	KW	Particulate matter, filterable (FPM)	Good combustion practices, burn ultra-low diesel fuel, and will be NSPS compliant.	0.2	G/KW-H
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUEMGD--emergency engine	diesel fuel	4474.2	KW	Particulate matter, total (TPM10)	Good combustion practices, burn ultra-low diesel fuel and be NSPS compliant	1	LB/H
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUEMGD--emergency engine	diesel fuel	4474.2	KW	Particulate matter, total (TPM2.5)	ultra-low sulfur diesel fuel	1	LB/H
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUFPRICE--A 315 HP diesel fueled emergency engine	Diesel	2.5	MMBTU/H	Particulate matter, total (TPM10)	Ultra low sulfur diesel fuel and good combustion practices	0.12	LB/H
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUFPRICE--A 315 HP diesel fueled emergency engine	Diesel	2.5	MMBTU/H	Particulate matter, total (TPM2.5)	Ultra low sulfur diesel fuel and good combustion practices	0.12	LB/H

RBLC Entries for Volatile Organic Compounds Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
AK-0083	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT06	1/6/2015	Diesel Fired Well Pump	Diesel	2.7	MMBTU/H	Volatile Organic Compounds (VOC)	Limited Operation of 168 hr/yr.	0.36	LB/MMBTU
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Twelve (12) Large ULSD/Natural Gas-Fired Internal Combustion Engines	Diesel and Natural Gas	143.5	MMBtu/hr	Volatile Organic Compounds (VOC)	Oxidation Catalyst and Good Combustion Practices	0.21	G/KW-HR (ULSD)
IL-0114	CRONUS CHEMICALS, LLC	IL	13060007	9/5/2014	Firewater Pump Engine	distillate fuel oil	373	hp	Volatile Organic Compounds (VOC)	Tier IV standards for non-road engines at 40 CFR 1039.102, Table 7.	0.4	G/KW-H
IN-0158	ST. JOSEPH ENERGY CENTER, LLC	IN	141-31003-00579	12/3/2012	TWO (2) FIREWATER PUMP Diesel ENGINES	Diesel	371	BHP, EACH	Volatile Organic Compounds (VOC)	COMBUSTION DESIGN CONTROLS AND USAGE LIMITS	0.16	LB/H
IN-0234	GRAIN PROCESSING CORPORATION	IN	027-35177-00046	12/8/2015	EMERGENCY FIRE PUMP ENGINE	DISTILLATE OIL	0	-	Volatile Organic Compounds (VOC)	GOOD COMBUSTION PRACTICES	0.05	G/HP-H
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	Caterpillar C18DITA Diesel Engine Generator	No. 2 Distillate Fuel Oil	900	BHP	Volatile Organic Compounds (VOC)	Utilize efficient combustion/design technology	0.015	G/BHP-H
*KS-0036	WESTAR ENERGY - EMPORIA ENERGY CENTER	KS	C-10656	3/18/2013	Cummins 6BTA 5.9F-1 Diesel Engine Fire Pump	No. 2 Fuel Oil	182	BHP	Volatile Organic Compounds (VOC)	Utilize efficient combustion/design technology	0.77	G/BHP-H
LA-0276	BATON ROUGE JUNCTION FACILITY	LA	PSD-LA-741(M4)	12/15/2016	Fire Pump Engines (2 units)	Diesel	700	hp	Volatile Organic Compounds (VOC)	Comply with standards of NSPS Subpart IIII	0	-
LA-0307	MAGNOLIA LNG FACILITY	LA	PSD-LA-792	3/21/2016	Diesel Engines	Diesel	0	-	Volatile Organic Compounds (VOC)	good combustion practices, Use Ultra Low Sulfur Diesel, and comply with 40 CFR 60 Subpart IIII	0	-
LA-0309	BENTELER STEEL TUBE FACILITY	LA	PSD-LA-774(M1)	6/4/2015	Firewater Pump Engines	Diesel	288	hp (each)	Volatile Organic Compounds (VOC)	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0309	BENTELER STEEL TUBE FACILITY	LA	PSD-LA-774(M1)	6/4/2015	Emergency Generator Engines	Diesel	2922	hp (each)	Volatile Organic Compounds (VOC)	Complying with 40 CFR 60 Subpart IIII	0	-
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DFP1-13 - Diesel Fire Pump Engine (EQT0013)	Diesel	650	horsepower	Volatile Organic Compounds (VOC)	Compliance with NNSPS Subpart IIII	0.13	LB/HR
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DEG1-13 - Diesel Fired Emergency Generator Engine (EQT0012)	Diesel	1474	horsepower	Volatile Organic Compounds (VOC)	Compliance with NSPS Subpart IIII	0.04	LB/HR
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Diesel Firewater pump engines (6 units)	Diesel	425	hp	Volatile Organic Compounds (VOC)	Complying with 40 CFR 63 subpart ZZZZ	0	-
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Diesel emergency generator engine - EGEN	Diesel	350	hp	Volatile Organic Compounds (VOC)	Complying with 40 CFR 63 subpart ZZZZ	0	-
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 1	Diesel	751	HP	Volatile Organic Compounds (VOC)	Compliance with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0.34	LB/H
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 2	Diesel	751	HP	Volatile Organic Compounds (VOC)	Compliance with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0.34	LB/H
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	firewater pump engines (8 units)	Diesel	460	hp	Volatile Organic Compounds (VOC)	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	emergency generator engines (6 units)	Diesel	3353	hp	Volatile Organic Compounds (VOC)	Complying with 40 CFR 60 Subpart IIII	0	-
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39A	Diesel Fuel	375	HP	Volatile Organic Compounds (VOC)	Good combustion practices and NSPS Subpart IIII	4	G/KW-H
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39B	Diesel Fuel	300	HP	Volatile Organic Compounds (VOC)	Good combustion practices and NSPS Subpart IIII	4	G/KW-H
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Firewater Pumps	Diesel Fuel	634	kW	Volatile Organic Compounds (VOC)	Good combustion and operating practices.	0.44	G/HP-H
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Large Emergency Engines (50kW)	Diesel Fuel	5364	HP	Volatile Organic Compounds (VOC)	Good combustion and operating practices.	0.79	G/KW-H
MD-0044	COVE POINT LNG TERMINAL	MD	PSC CASE NO. 9318	6/9/2014	5 EMERGENCY FIRE WATER PUMP ENGINES	Ultra Low Sulfur Diesel	350	HP	Volatile Organic Compounds (VOC)	USE ONLY ULSD, GOOD COMBUSTION PRACTICES, AND DESIGNED TO ACHIEVE EMISSION LIMIT	3	G/HP-H
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	EU-FPENGINE: Diesel fuel fired emergency backup fire pump	Diesel fuel	315	hp nameplate	Volatile Organic Compounds (VOC)	Proper combustion design and Ultra Low Sulfur Diesel fuel.	0	-
MI-0412	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13	12/4/2013	Emergency Engine --Diesel Fire Pump (EUFPENGINE)	Diesel	165	HP	Volatile Organic Compounds (VOC)	Good combustion practices	0.001	LB/H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUEMENGINE (Diesel fuel emergency engine)	Diesel Fuel	22.68	MMBTU/H	Volatile Organic Compounds (VOC)	Good combustion practices.	1.87	LB/H
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	1.66	MMBTU/H	Volatile Organic Compounds (VOC)	Good combustion practices	0.64	LB/H
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13C	12/5/2016	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	500	H/YR	Volatile Organic Compounds (VOC)	Good combustion practices	0.47	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (South Plant): Fire pump engine	Diesel	300	HP	Volatile Organic Compounds (VOC)	Good combustion practices.	0.75	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (North Plant): Emergency Engine	Diesel	1341	HP	Volatile Organic Compounds (VOC)	Good combustion practices.	0.86	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (North Plant): Fire pump engine	Diesel	300	HP	Volatile Organic Compounds (VOC)	Good combustion practices	0.75	LB/H
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (South Plant): Emergency Engine	Diesel	1341	HP	Volatile Organic Compounds (VOC)	Good combustion practices	0.86	LB/H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUEMENGINE: Emergency engine	Diesel	2	MW	Volatile Organic Compounds (VOC)	State of the art combustion design.	1.89	LB/H
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUFPENGINE: Fire pump engine	Diesel	399	BHP	Volatile Organic Compounds (VOC)	State of the art combustion design.	0.13	LB/H
OH-0345	DP&L J.M. STUART GENERATING STATION	OH	P0106503	8/16/2011	Crusher/screener with 300 HP; 110 HP Diesel engines	Diesel	0	-	Volatile Organic Compounds (VOC)	Tier III CARB Certified Diesel engines	1.82	LB/H
OH-0352	OREGON CLEAN ENERGY CENTER	OH	P0110840	6/18/2013	Emergency fire pump engine	Diesel	300	HP	Volatile Organic Compounds (VOC)	Purchased certified to the standards in NSPS Subpart IIII	0.25	LB/H
OH-0360	CARROLL COUNTY ENERGY	OH	P0113762	11/5/2013	Emergency fire pump engine (P004)	Diesel	400	HP	Volatile Organic Compounds (VOC)	Purchased certified to the standards in NSPS Subpart IIII	0.325	LB/H
*OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	OH	P0117655	8/25/2015	Emergency fire pump engine (P004)	Diesel fuel	140	HP	Volatile Organic Compounds (VOC)	State-of-the-art combustion design	0.11	LB/H
*OH-0367	SOUTH FIELD ENERGY LLC	OH	P0119495	9/23/2016	Emergency fire pump engine (P004)	Diesel fuel	311	HP	Volatile Organic Compounds (VOC)	State-of-the-art combustion design	0.25	LB/H

RBLC Entries for Volatile Organic Compounds Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*OH-0368	PALLAS NITROGEN LLC	OH	P0118959	4/19/2017	Emergency Fire Pump Diesel Engine (P008)	Diesel fuel	460	HP	Volatile Organic Compounds (VOC)	Good combustion control and operating practices and engines designed to meet the stands of 40 CFR Part 60, Subpart IIII	0.14	LB/H
*OH-0370	TRUMBULL ENERGY CENTER	OH	P0122331	9/7/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Volatile Organic Compounds (VOC)	State-of-the-art combustion design	0.24	LB/H
*OH-0372	OREGON ENERGY CENTER	OH	P0121049	9/27/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Volatile Organic Compounds (VOC)	State-of-the-art combustion design	0.24	LB/H
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Generator Engine (P001)	Diesel fuel	2206	HP	Volatile Organic Compounds (VOC)	Good combustion design	24.71	LB/H
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Fire Pump Engine (P002)	Diesel fuel	700	HP	Volatile Organic Compounds (VOC)	Good combustion design	4.97	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Firewater Pumps (P005 and P006)	Diesel fuel	402	HP	Volatile Organic Compounds (VOC)	Certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII and employ good combustion practices per the manufacturer's operating manual	2.64	LB/H
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Emergency Diesel-fired Generator Engine (P007)	Diesel fuel	3353	HP	Volatile Organic Compounds (VOC)	certified to the meet the emissions standards in Table 4 of 40 CFR Part 60, Subpart IIII, shall employ good combustion practices per the manufacturer's operating manual	37.41	LB/H
OK-0154	MOORELAND GENERATING STA	OK	2008-302-C(M-1)PSD	7/2/2013	Diesel-FIRED EMERGENCY GENERATOR ENGINE	Diesel	1341	HP	Volatile Organic Compounds (VOC)	COMBUSTION CONTROL.	0.0007	LB/HP-HR
OK-0156	NORTHSTAR AGRI IND ENID	OK	2013-0109-C PSD	7/31/2013	Fire Pump Engine	Diesel	550	hp	Volatile Organic Compounds (VOC)	Good Combustion	0.35	LB/MMBTU
OK-0164	MIDWEST CITY AIR DEPOT	OK	2009-394-C(M-2)PSD	1/8/2015	Diesel-Fueled Fire Pump Engines	Ultra-Low Sulfur Distillate Fuel	300	HP	Volatile Organic Compounds (VOC)	Good Combustion Practices.	0.15	GRAMS PER HP-HR
OK-0173	CMC STEEL OKLAHOMA	OK	2015-0643-C PSD	1/19/2016	Emergency Diesel Engines	Ultra-low sulfur Diesel	15	ppm by weight sulfur	Volatile Organic Compounds (VOC)	The applicant has proposed BACT for the control of VOC emissions resulting from the combustion of fuel oil for the emergency generators and fire pump as the use of low sulfur No. 2 fuel oil combined with good combustion practices and limited annual operation.	0	-
OK-0175	WILDHORSE TERMINAL	OK	2016-1066-C PSD	6/29/2017	Emergency Use Engines 500 HP	Diesel	0	-	Volatile Organic Compounds (VOC)	Good combustion practices. Certified to meet EPA Tier 3 engine standards. Shall be limited to operate at no more than 500 hr/yr.	3	GM/HP-HR
OK-0175	WILDHORSE TERMINAL	OK	2016-1066-C PSD	6/29/2017	Emergency Use Engine less than or equal to 500 HP	Diesel	0	-	Volatile Organic Compounds (VOC)	Good combustion practices, certified to meet EPA Tier 3 engine standards. Gen-1, FP-1, and FP-2 shall be limited to operate no more than 500 hr/yr.	3	GM/HP-HR
SC-0113	PYRAMAX CERAMICS, LLC	SC	0160-0023	2/8/2012	EMERGENCY ENGINE 1 THRU 8	Diesel	29	HP	Volatile Organic Compounds (VOC)	PURCHASE OF CERTIFIED ENGINES. HOURS OF OPERATION LIMITED TO 100 HOURS FOR MAINTENANCE AND TESTING.	7.5	GR/KW-H
SC-0113	PYRAMAX CERAMICS, LLC	SC	0160-0023	2/8/2012	FIRE PUMP	Diesel	500	HP	Volatile Organic Compounds (VOC)	CERTIFIED ENGINES THAT COMPLY WITH NSPS, SUBPART IIII. HOURS OF OPERATION LIMITED TO 100 HOURS PER YEAR FOR MAINTENANCE AND TESTING.	4	GR/KW-H
TX-0799	BEAUMONT TERMINAL	TX	18295, PSDTX1466, GHGPSDTX139	6/8/2016	Fire pump engines	Diesel	0	-	Volatile Organic Compounds (VOC)	Equipment specifications and good combustion practices. Operation limited to 100 hours per year.	0.0007	LB/HP-HR
TX-0799	BEAUMONT TERMINAL	TX	18295, PSDTX1466, GHGPSDTX139	6/8/2016	EMERGENCY ENGINES	Diesel	0	-	Volatile Organic Compounds (VOC)	Equipment specifications and good combustion practices. Operation limited to 100 hours per year.	0.0025	LB/HP-HR
TX-0822	CEMENT PLANT	TX	7369, PSDTX120M4, AND GHGPSDTX	6/30/2017	Emergency Engine	Diesel	0	-	Volatile Organic Compounds (VOC)	GOOD COMBUSTION PRACTICES	0.23	LB/HR
TX-0823	LYONDELL CHEMICAL BAYPORT CHOATE PLANT	TX	137789 AND N244	6/7/2017	Emergency Diesel Engines	Diesel	0	-	Volatile Organic Compounds (VOC)	Good combustion practice; compliance with NSPS IIII, fired with ULSD	0.01	T/YR
TX-0846	MOTOR VEHICLE ASSEMBLY PLANT	TX	70661, PSDTX1036M1, GHGPSDTX18	9/23/2018	FIRE PUMP Diesel ENGINE	NO 2 Diesel	214	kW	Volatile Organic Compounds (VOC)	Meets EPA Tier 4 requirements	0.19	G/KW
*VA-0328	C4GT, LLC	VA	52588	4/26/2018	Emergency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Volatile Organic Compounds (VOC)	Good combustion practices and the use of Ultra Low Sulfur Diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	0	-
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	One (1) Black Start Generator Engine	ULSD	186.6	gph	Volatile Organic Compounds (VOC)	Oxidation Catalyst, Good combustion practices, and limit operation to 500 hours per year.	0.18	G/HP-HR
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Three (3) Firewater Pump Engines and two (2) Emergency Diesel Generators	ULSD	19.4	gph	Volatile Organic Compounds (VOC)	Good combustion practices, ULSD, and limit operation to 500 hours per year.	0.19	G/HP-HR
*AR-0161	SUN BIO MATERIAL COMPANY	AR	2384-AOP-R0	9/23/2019	Emergency Engines	Diesel	0	-	Volatile Organic Compounds (VOC)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	1.9	G/KW-HR
AR-0163	BIG RIVER STEEL LLC	AR	2305-AOP-R6	6/9/2019	Emergency Engines	Diesel	0	-	Volatile Organic Compounds (VOC)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	1.55	G/KW-HR
*OK-0181	WILDHORSE TERMINAL	OK	2016-1066-C(M-1)PSD	9/11/2019	EMERGENCY USE ENGINES > 500 HP	DIESEL	0	-	Volatile Organic Compounds (VOC)	Good combustion practices. Certified to meet EPA Tier 3 engine standards. Each engine shall be limited to operate not more than 500 hours per year.	3	GM/HP-HR
*OK-0181	WILDHORSE TERMINAL	OK	2016-1066-C(M-1)PSD	9/11/2019	EMERGENCY USE ENGINES < 500 HP	DIESEL	0	-	Volatile Organic Compounds (VOC)	Good Combustion Practices. Certified to meet EPA Tier 3 engine standards. Gen-1 and FP-1 shall be limited to operate not more than 500 hours per year. SP-1 shall be limited to operate not more than 876 hours per year.	3	GM/HP-HR
TX-0864	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	TX	N266, PSDTX1542, GHGPSDTX183	9/9/2019	EMERGENCY DIESEL ENGINE	Ultra-low sulfur diesel	0	-	Volatile Organic Compounds (VOC)	Tier 4 exhaust emission standards specified at 40 CFR § 1039.101(b), 100 HR / YR	0	-
TX-0866	PORTLAND CEMENT PRODUCTION PLANT	TX	PSDTX1552, GHGPSDTX189	10/24/2019	EMERGENCY ENGINE	ULTRA LOW S DIESEL	0	-	Volatile Organic Compounds (VOC)	best combustion practices, clean fuel	0.0007	LB/HP HR
TX-0879	MOTIVA PORT ARTHUR TERMINAL	TX	7238 AND PSDTX1548	2/19/2020	Emergency Firewater Engine	Ultra-low sulfur diesel	0	-	Volatile Organic Compounds (VOC)	Meeting the requirements of 40 CFR Part 60, Subpart IIII. Firing ultra-low sulfur diesel fuel (no more than 15 ppm sulfur by weight). Limited to 100 hrs/yr of non-emergency operation. Have a non-resettable runtime meter.	0.1	G/HP HR

RBLC Entries for Volatile Organic Compounds Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
TX-0882	SDSW STEEL MILL	TX	156458, PSDTX1562, AND GHGPSDT	1/17/2020	EMERGENCY ENGINES	DIESEL	0	-	Volatile Organic Compounds (VOC)	GOOD COMBUSTION PRACTICES, CLEAN FUEL, 100 HR/YR, ULTRA LOW SULFUR FUEL	0.001	LB/MMBTU
TX-0886	MONT BELVIEU NGL FRACTIONATION UNIT	TX	106921, N270	3/31/2020	EMERGENCY DIESEL ENGINE	Ultra-low sulfur diesel	0	-	Volatile Organic Compounds (VOC)	Limited operating hours, good combustion practices meets NSPS IIII Tier 3 engine	0	-
TX-0888	ORANGE POLYETHYLENE PLANT	TX	155952 PSDTX1556 GHGPSDTX192	4/23/2020	EMERGENCY GENERATORS; FIRE WATER PUMP ENGINES	Ultra-low Sulfur Diesel	0	-	Volatile Organic Compounds (VOC)	well-designed and properly maintained engines and each limited to 100 hours per year of non-emergency use.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-02 - North Water System Emergency Generator	Diesel	2922	HP	Volatile Organic Compounds (VOC)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-03 - South Water System Emergency Generator	Diesel	2922	HP	Volatile Organic Compounds (VOC)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-04 - Emergency Fire Water Pump	Diesel	920	HP	Volatile Organic Compounds (VOC)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-01 - Melt Shop Emergency Generator	Diesel	260	HP	Volatile Organic Compounds (VOC)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-02 - Reheat Furnace Emergency Generator	Diesel	190	HP	Volatile Organic Compounds (VOC)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-07 - Air Separation Plant Emergency Generator	Diesel	700	HP	Volatile Organic Compounds (VOC)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-01 - Caster Emergency Generator	Diesel	2922	HP	Volatile Organic Compounds (VOC)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-03 - Rolling Mill Emergency Generator	Diesel	440	HP	Volatile Organic Compounds (VOC)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-04 - IT Emergency Generator	Diesel	190	HP	Volatile Organic Compounds (VOC)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-05 - Radio Tower Emergency Generator	Diesel	61	HP	Volatile Organic Compounds (VOC)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
*VA-0332	CHICKAHOMINY POWER LLC	VA	52610-1	6/24/2019	Emegency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Volatile Organic Compounds (VOC)	good combustion practices, high efficiency design, and the use of ultra low sulfur diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	0.11	G/HP-HR
*AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	Diesel Fired Well Pump	Diesel	2.7	MMBtu/hr	Volatile Organic Compounds (VOC)	Good Combustion Practices and Limited Use	0.36	LB/MMBTU
AR-0168	BIG RIVER STEEL LLC	AR	2305-AOP-R7	3/17/2021	Emergency Engines	Diesel	0	-	Volatile Organic Compounds (VOC)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	1.55	G/KW-HR
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency Generator Parking Garage	Diesel	0	-	Volatile Organic Compounds (VOC)	The use of certified engines, design of engines to include turbocharger and an intercooler/aftercooler, good combustion practices and proper operation and maintenance including certification to applicable federal emission standards	2.37	GRAM
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency GeneratorTelecom Hut & Tower	diesel	0	-	Volatile Organic Compounds (VOC)	The use of certified engines, design of engines to include turbocharger and an intercooler/aftercooler, good combustion practices and proper operation and maintenance including certification to applicable federal emission standards	2.83	G
AR-0173	BIG RIVER STEEL LLC	AR	2445-AOP-R0	1/31/2022	Emergency Engines	Diesel	0	-	Volatile Organic Compounds (VOC)	Good Operating Practices, limited hours of operation, Compliance with NSPS Subpart IIII	0.13	G/BHP-HR
*LA-0387	TAYLOR SAWMILL	LA	PSD-LA-842	4/12/2022	Firewater Pump Engine (FIR)	Diesel	274	horsepower	Volatile Organic Compounds (VOC)	Compliance with 40 CFR 60 Subpart IIII	0.02	TPY
*LA-0388	LACC LLC US - ETHYLENE PLANT	LA	PSD-LA-B00(M-1)	2/25/2022	Firewater Pump Engine No. 1 and 2	Diesel	575	hp	Volatile Organic Compounds (VOC)	Compliance with 40 CFR 60 Subpart IIII	0.32	LB/HR

RBLC Entries for Greenhouse Gases Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
AK-0083	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT06	1/6/2015	Diesel Fired Well Pump	Diesel	2.7	MMBTU/H	Carbon Dioxide Equivalent (CO2e)	Limited Operation of 168 hr/yr.	37.2	TONS/YEAR
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Black Start and Emergency Internal Cumbustion Engines	Diesel	1500	kWe	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices	2781	TPY
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Fire Pump Diesel Internal Combustion Engines	Diesel	252	hp	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices	216	TPY (COMBINED)
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Twelve (12) Large ULSD/Natural Gas-Fired Internal Combustion Engines	Diesel and Natural Gas	143.5	MMBtu/hr	Carbon Dioxide Equivalent (CO2e)	Good Cumbustion Practices	1299630	TPY (ULSD)
IL-0114	CRONUS CHEMICALS, LLC	IL	13060007	9/5/2014	Firewater Pump Engine	distillate fuel oil	373	hp	Carbon Dioxide Equivalent (CO2e)	Tier IV standards for non-road engines at 40 CFR 1039.102, Table 7.	72	TPY
IN-0158	ST. JOSEPH ENERGY CENTER, LLC	IN	141-31003-00579	12/3/2012	TWO (2) FIREWATER PUMP Diesel ENGINES	Diesel	371	BHP, EACH	Carbon Dioxide Equivalent (CO2e)	GOOD ENGINEERING DESIGN AND FUEL EFFICIENT DESIGN	172	TONS
LA-0305	LAKE CHARLES METHANOL FACILITY	LA	PSD-LA-803(M1)	6/30/2016	Diesel Engines (Emergency)	Diesel	4023	hp	Carbon Dioxide Equivalent (CO2e)	Complying with 40 CFR 60 Subpart IIII	0	-
*LA-0306	TOPCHEM POLLOCK, LLC	LA	PSD-LA-815	12/20/2016	Genenerator Engine DEG-16-1 (EQT035)	Diesel	460	horsepower	Carbon Dioxide Equivalent (CO2e)	Meet NSPS Subpart IIII Limitations and Good Combustion Practices	26	Y/YR
*LA-0306	TOPCHEM POLLOCK, LLC	LA	PSD-LA-815	12/20/2016	Pump Engines DFP-16-1 (EQT036)	Diesel	225	horsepower	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices	13	T/YR
*LA-0306	TOPCHEM POLLOCK, LLC	LA	PSD-LA-815	12/20/2016	Pump Engine DFP-16-2 (EQT037)	Diesel	225	horsepower	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices	13	T/YR
LA-0307	MAGNOLIA LNG FACILITY	LA	PSD-LA-792	3/21/2016	Diesel Engines	Diesel	0	-	Carbon Dioxide Equivalent (CO2e)	Good combustion/operating/maintenance practices	0	-
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DFP1-13 - Diesel Fire Pump Engine (EQT0013)	Diesel	650	horsepower	Carbon Dioxide Equivalent (CO2e)	Compliance with NSPS Subpart IIII	37	TPY
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	DEG1-13 - Diesel Fired Emergency Generator Engine (EQT0012)	Diesel	1474	horsepower	Carbon Dioxide Equivalent (CO2e)	Compliance with NSPS Subpart IIII	84	TPY
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 1	Diesel	751	HP	Carbon Dioxide Equivalent (CO2e)	Proper design and operation; use of ultra-low sulfur Diesel	0	-
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Fire Pump Diesel Engine 2	Diesel	751	HP	Carbon Dioxide Equivalent (CO2e)	Proper design and operation; use of ultra-low sulfur Diesel	0	-
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	firewater pump engines (8 units)	Diesel	460	hp	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices	0	-
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	emergency generator engines (6 units)	Diesel	3353	hp	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices	0	-
LA-0317	METHANEX - GEISMAR METHANOL PLANT	LA	PSD-LA-761(M4)	12/22/2016	Emergency Generator Engines (4 units)	Diesel	0	-	Carbon Dioxide Equivalent (CO2e)	Complying with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0	-
LA-0317	METHANEX - GEISMAR METHANOL PLANT	LA	PSD-LA-761(M4)	12/22/2016	Firewater pump Engines (4 units)	Diesel	896	hp (each)	Carbon Dioxide Equivalent (CO2e)	Complying with 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Fire Water Diesel Pump No. 3 Engine	Diesel Fuel	600	hp	Carbon Dioxide Equivalent (CO2e)	Proper operation and limits on hours operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Fire Water Diesel Pump No. 4 Engine	Diesel Fuel	600	hp	Carbon Dioxide Equivalent (CO2e)	Proper operation and limits on hours of operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0323	MONSANTO LULING PLANT	LA	PSD-LA-890	1/9/2017	Standby Generator No. 9 Engine	Diesel Fuel	400	hp	Carbon Dioxide Equivalent (CO2e)	Proper operation and limits on hours of operation for emergency engines and compliance with 40 CFR 60 Subpart IIII	0	-
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39A	Diesel Fuel	375	HP	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices	28	T/YR
LA-0328	PLAQUEMINES PLANT 1	LA	PSD-LA-709(M-3)	5/2/2018	Emergency Diesel Engine Pump P-39B	Diesel Fuel	300	HP	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices	28	T/YR
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Firewater Pumps	Diesel Fuel	634	kW	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices and Good Operation and Maintenance Practices.	44	T/YR
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Large Emergency Engines (50kW)	Diesel Fuel	5364	HP	Carbon Dioxide Equivalent (CO2e)	Good Combustion of Practices and Good Operation and Maintenance Practices	1481	T/YR
MI-0402	SUMPTER POWER PLANT	MI	81-11	11/17/2011	Diesel fuel-fired combustion engine (RICE)	Diesel	732	HP	Carbon Dioxide Equivalent (CO2e)	Good combustion practices	716.6	LB/H
MI-0406	RENAISSANCE POWER LLC	MI	51-13	11/1/2013	FG-EMGEN7-8; Two (2) 1,000kW Diesel-fueled emergency reciprocating internal combustion engines	Diesel	1000	kW	Carbon Dioxide Equivalent (CO2e)	Good combustion practices.	1731.4	T/YR
MI-0410	THETFORD GENERATING STATION	MI	191-12	7/25/2013	EU-FPENGINE: Diesel fuel fired emergency backup fire pump	Diesel fuel	315	hp nameplate	Carbon Dioxide Equivalent (CO2e)	Proper combustion design and Ultra Low Sulfur Diesel fuel.	15.6	T/YR
MI-0412	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13	12/4/2013	Emergency Engine --Diesel Fire Pump (EUFPENGINE)	Diesel	165	HP	Carbon Dioxide Equivalent (CO2e)	Good combustion practices	0.29	T/YR
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Emergency Diesel Generator Engine (EUEMRGRICE in FGRICE)	Diesel	500	H/YR	Carbon Dioxide Equivalent (CO2e)	Good combustion and design practices.	223	T/YR
MI-0421	GRAYLING PARTICLEBOARD	MI	59-16	8/26/2016	Dieself fire pump engine (EUFIREPUMP in FGRICE)	Diesel	500	H/YR	Carbon Dioxide Equivalent (CO2e)	Good combustion and design practices.	56	T/YR
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUEMENGINE (Diesel fuel emergency engine)	Diesel Fuel	22.68	MMBTU/H	Carbon Dioxide Equivalent (CO2e)	Good combustion practices	928	T/YR
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	1.66	MMBTU/H	Carbon Dioxide Equivalent (CO2e)	Good combustion practices	13.58	T/YR
MI-0424	HOLLAND BOARD OF PUBLIC WORKS - EAST 5TH STREET	MI	107-13C	12/5/2016	EUFPENGINE (Emergency engine--Diesel fire pump)	Diesel	500	H/YR	Carbon Dioxide Equivalent (CO2e)	Good combustion practices.	55.6	T/YR
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE1 in FGRICE (Emergency Diesel generator engine)	Diesel	500	H/YR	Carbon Dioxide Equivalent (CO2e)	Good combustion and design practices.	209	T/YR
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUEMRGRICE2 in FGRICE (Emergency Diesel Generator Engine)	Diesel	500	H/YR	Carbon Dioxide Equivalent (CO2e)	Good combustion and design practices.	70	T/YR
MI-0425	GRAYLING PARTICLEBOARD	MI	59-16A	5/9/2017	EUFIREPUMP in FGRICE (Diesel fire pump engine)	Diesel	500	H/YR	Carbon Dioxide Equivalent (CO2e)	Good combustion and design practices.	56	T/YR
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (South Plant): Fire pump engine	Diesel	300	HP	Carbon Dioxide Equivalent (CO2e)	Good combustion practices.	85.6	T/YR

RBLC Entries for Greenhouse Gases Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (North Plant): Emergency Engine	Diesel	1341	HP	Carbon Dioxide Equivalent (CO2e)	Good combustion practices.	383	T/YR
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUFPENGINE (North Plant): Fire pump engine	Diesel	300	HP	Carbon Dioxide Equivalent (CO2e)	Good combustion practices.	85.6	T/YR
MI-0433	MEC NORTH, LLC AND MEC SOUTH LLC	MI	167-17 AND 168-17	6/29/2018	EUEMENGINE (South Plant): Emergency Engine	Diesel	1341	HP	Carbon Dioxide Equivalent (CO2e)	Good combustion practices.	383	T/YR
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUEMENGINE: Emergency engine	Diesel	2	MW	Carbon Dioxide Equivalent (CO2e)	Energy efficient design.	161	T/YR
MI-0435	BELLE RIVER COMBINED CYCLE POWER PLANT	MI	19-18	7/16/2018	EUFPENGINE: Fire pump engine	Diesel	399	BHP	Carbon Dioxide Equivalent (CO2e)	Energy efficient design	86	T/YR
OH-0359	DTE MARIETTA	OH	P0115137	3/31/2014	black start generator w/ 1,141 hp Diesel engine (P002)	Diesel fuel	1141	HP	Carbon Dioxide Equivalent (CO2e)	Fuel efficient engine (good combustion practices)	65.3	T/YR
OH-0363	NTE OHIO, LLC	OH	P0116610	11/5/2014	Emergency Fire Pump Engine (P003)	Diesel fuel	260	HP	Carbon Dioxide Equivalent (CO2e)	Emergency operation only, < 500 hours/year each for maintenance checks and readiness testing designed to meet NSPS Subpart IIII	75	T/YR
*OH-0366	CLEAN ENERGY FUTURE - LORDSTOWN, LLC	OH	P0117655	8/25/2015	Emergency fire pump engine (P004)	Diesel fuel	140	HP	Carbon Dioxide Equivalent (CO2e)	Efficient design	41	T/YR
*OH-0367	SOUTH FIELD ENERGY LLC	OH	P0119495	9/23/2016	Emergency fire pump engine (P004)	Diesel fuel	311	HP	Carbon Dioxide Equivalent (CO2e)	Efficient design	90	T/YR
*OH-0368	PALLAS NITROGEN LLC	OH	P0118959	4/19/2017	Emergency Fire Pump Diesel Engine (P008)	Diesel fuel	460	HP	Carbon Dioxide Equivalent (CO2e)	Good combustion control and operating practices and engines designed to meet the stands of 40 CFR Part 60, Subpart IIII	123	T/YR
*OH-0370	TRUMBULL ENERGY CENTER	OH	P0122331	9/7/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Carbon Dioxide Equivalent (CO2e)	Efficient design	87	T/YR
*OH-0372	OREGON ENERGY CENTER	OH	P0121049	9/27/2017	Emergency fire pump engine (P004)	Diesel fuel	300	HP	Carbon Dioxide Equivalent (CO2e)	State-of-the-art combustion design	87	T/YR
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Generator Engine (P001)	Diesel fuel	2206	HP	Carbon Dioxide Equivalent (CO2e)	Efficient design	116.8	T/YR
*OH-0375	LONG RIDGE ENERGY GENERATION LLC - HANNIBAL POWER	OH	P0122829	11/7/2017	Emergency Diesel Fire Pump Engine (P002)	Diesel fuel	700	HP	Carbon Dioxide Equivalent (CO2e)	Efficient design	40.1	T/YR
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Firewater Pumps (P005 and P006)	Diesel fuel	402	HP	Carbon Dioxide Equivalent (CO2e)	Good operating practices (proper maintenance and operation)	23	T/YR
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Emergency Diesel-fired Generator Engine (P007)	Diesel fuel	3353	HP	Carbon Dioxide Equivalent (CO2e)	Good operating practices (proper maintenance and operation)	200	T/YR
OK-0154	MOORELAND GENERATING STA	OK	2008-302-C(M-1)PSD	7/2/2013	Diesel-FIRED EMERGENCY GENERATOR ENGINE	Diesel	1341	HP	Carbon Dioxide Equivalent (CO2e)	A TIER 3 CERTIFIED ENGINE OPERATED < 100 HR/YR.	81.2	TPY
OK-0164	MIDWEST CITY AIR DEPOT	OK	2009-394-C(M-2)PSD	1/8/2015	Diesel-Fueled Fire Pump Engines	Ultra-Low Sulfur Distillate Fuel	300	HP	Carbon Dioxide Equivalent (CO2e)	1. Good Combustion Practices. 2. Efficient Design.	44	TONS PER YEAR
OK-0173	CMC STEEL OKLAHOMA	OK	2015-0643-C PSD	1/19/2016	Emergency Diesel Engines	Ultra-low sulfur Diesel	15	ppm by weight sulfur	Carbon Dioxide Equivalent (CO2e)	The applicant has proposed BACT for the control of GHG emissions resulting from the combustion of fuel oil for the emergency generators and fire pump as the use of low sulfur No. 2 fuel oil combined with good combustion practices and limited annual operation.	0	-
TX-0766	GOLDEN PASS LNG EXPORT TERMINAL	TX	116055, PSDTX1386, GHGPSDTX100	9/11/2015	Emergency Engine Generators	Diesel	750	hp	Carbon Dioxide Equivalent (CO2e)	Equipment specifications & work practices - Good combustion practices and limited operational hours	40	HR/YR
TX-0799	BEAUMONT TERMINAL	TX	18295, PSDTX1466, GHGPSDTX139	6/8/2016	Fire pump engines	Diesel	0	-	Carbon Dioxide Equivalent (CO2e)	Equipment specifications and good combustion practices. Operation limited to 100 hours per year.	72.16	T/YR
TX-0799	BEAUMONT TERMINAL	TX	18295, PSDTX1466, GHGPSDTX139	6/8/2016	EMERGENCY ENGINES	Diesel	0	-	Carbon Dioxide Equivalent (CO2e)	Equipment specifications and good combustion practices. Operation limited to 100 hours per year.	6.79	T/YR
TX-0822	CEMENT PLANT	TX	7369, PSDTX120M4, AND GHGPSDTX	6/30/2017	Emergency Engine	Diesel	0	-	Carbon Dioxide Equivalent (CO2e)	GOOD COMBUSTION PRACTICES	115	LB/YR
TX-0846	MOTOR VEHICLE ASSEMBLY PLANT	TX	70661, PSDTX1036M1, GHGPSDTX18	9/23/2018	FIRE PUMP Diesel ENGINE	NO 2 Diesel	214	kW	Carbon Dioxide Equivalent (CO2e)	Meets EPA Tier 4 requirements . Fuels with a low carbon density, regular equipment maintenance, the use of efficient equipment and operation limited to less than 100 hr/yr	0	-
WY-0076	ROCK SPRINGS FERTILIZER COMPLEX	WY	MD-14824	7/1/2014	Fire Water Pump Engine	Diesel	200	HP	Carbon Dioxide Equivalent (CO2e)	Limited to 500 hours of operation per year	58	T/YR
TX-0612	THOMAS C. FERGUSON POWER PLANT	TX	PSD-TX-1244-GHG	11/10/2011	FWP1-STK Diesel FIRED FIRE WATER PUMP	Diesel	617	HP	Carbon Dioxide Equivalent (CO2e)	Best Work practice	7027.8	LB/H
VA-0319	GATEWAY COGENERATION 1, LLC - SMART WATER PROJECT	VA	52375-002	8/27/2012	FIRE WATER PUMP	Diesel (Ultra Low Sulfur)	1.86	MMBTU/H	Carbon Dioxide Equivalent (CO2e)	Fuel-efficient design	30.5	T/YR
*VA-0328	C4GT, LLC	VA	52588	4/26/2018	Emergency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Carbon Dioxide Equivalent (CO2e)	Good combustion practices and the use of Ultra Low Sulfur Diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	1040	T/YR
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-02 - North Water System Emergency Generator	Diesel	2922	HP	Carbon Dioxide Equivalent (CO2e)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-03 - South Water System Emergency Generator	Diesel	2922	HP	Carbon Dioxide Equivalent (CO2e)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-04 - Emergency Fire Water Pump	Diesel	920	HP	Carbon Dioxide Equivalent (CO2e)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-01 - Melt Shop Emergency Generator	Diesel	260	HP	Carbon Dioxide Equivalent (CO2e)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-

RBLC Entries for Greenhouse Gases Control from Internal Combustion Engines

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-02 - Reheat Furnace Emergency Generator	Diesel	190	HP	Carbon Dioxide Equivalent (CO2e)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-07 - Air Separation Plant Emergency Generator	Diesel	700	HP	Carbon Dioxide Equivalent (CO2e)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 10-01 - Caster Emergency Generator	Diesel	2922	HP	Carbon Dioxide Equivalent (CO2e)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-03 - Rolling Mill Emergency Generator	Diesel	440	HP	Carbon Dioxide Equivalent (CO2e)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-04 - IT Emergency Generator	Diesel	190	HP	Carbon Dioxide Equivalent (CO2e)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 11-05 - Radio Tower Emergency Generator	Diesel	61	HP	Carbon Dioxide Equivalent (CO2e)	This EP is required to have a Good Combustion and Operating Practices (GCOP) Plan.	0	-
TX-0888	ORANGE POLYETHYLENE PLANT	TX	155952 PSDTX1556 GHGPSDTX192	4/23/2020	EMERGENCY GENERATORS; FIRE WATER PUMP ENGINES	Ultra-low Sulfur Diesel	0	-	Carbon Dioxide Equivalent (CO2e)	well-designed and properly maintained engines and each limited to 100 hours per year of non-emergency use.	0	-
*VA-0332	CHICKAHOMINY POWER LLC	VA	52610-1	6/24/2019	Emergency Diesel Generator - 300 kW	Ultra Low Sulfur Diesel	500	H/YR	Carbon Dioxide Equivalent (CO2e)	good combustion practices, high efficiency design, and the use of ultra low sulfur diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	1203	T/YR
*VA-0332	CHICKAHOMINY POWER LLC	VA	52610-1	6/24/2019	Emegency Fire Water Pump	Ultra Low Sulfur Diesel	500	HR/YR	Carbon Dioxide Equivalent (CO2e)	good combustion practices, high efficiency design, and the use of ultra low sulfur diesel (S15 ULSD) fuel oil with a maximum sulfur content of 15 ppmw.	106	T/YR
*AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	Diesel Fired Well Pump	Diesel	2.7	MMBtu/hr	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices and Limited Use	164	LB/MMBTU
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUEMGD--emergency engine	diesel fuel	4474.2	KW	Carbon Dioxide Equivalent (CO2e)	low carbon fuel (pipeline quality natural gas), good combustion practices, and energy efficiency measures.	590	T/YR
MI-0447	LBWL--ERICKSON STATION	MI	74-18A	1/7/2021	EUFPRICE--A 315 HP diesel fueled emergency engine	Diesel	2.5	MMBTU/H	Carbon Dioxide Equivalent (CO2e)	Low carbon fuel (pipeline quality natural gas), good combustion practices and energy efficiency measures.	20	T/YR
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency Generator Parking Garage	Diesel	0	-	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices - no feasible control technologies, 10 tons CO2e Year 12 month rolling basis for Parking Garage and Telecom emergency generators combined	10	TONS
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Emergency GeneratorTelecom Hut & Tower	diesel	0	-	Carbon Dioxide Equivalent (CO2e)	Good Combustion Practices - no feasible control technologies, 10 tons CO2e Year 12 month rolling basis for Parking Garage and Telecom emergency generators combined	10	TONS
AR-0173	BIG RIVER STEEL LLC	AR	2445-AOP-R0	1/31/2022	Emergency Engines	Diesel	0	-	Carbon Dioxide Equivalent (CO2e)	Good Operating Practices	164	LB/MMBTU
*LA-0388	LACC LLC US - ETHYLENE PLANT	LA	PSD-LA-800(M-1)	2/25/2022	Firewater Pump Engine No. 1 and 2	Diesel	575	hp	Carbon Dioxide Equivalent (CO2e)	Compliance with 40 CFR 60 Subpart IIII	33	T/YR

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*TX-0661	OILTANKING APPELT TERMINAL	TX	95968, N188	6/30/2014	390 Mbbl Storage Tanks- Routine Operations	-	23.4	MMbbl/year	Volatile Organic Compounds (VOC)	Domed External Floating Roof	7.56	LB
*TX-0661	OILTANKING APPELT TERMINAL	TX	95968, N188	6/30/2014	210 Mbbl Storage Tank- Routine Operations	-	7.62	MMgal/yr	Volatile Organic Compounds (VOC)	Domed External Floating Roof	10.29	POUND
*TX-0661	OILTANKING APPELT TERMINAL	TX	95968, N188	6/30/2014	127 Mbbl Storage Tank- Routine Operations	-	7.62	MMgal/year	Volatile Organic Compounds (VOC)	Domed External Floating Roof	13.17	POUND
TX-0731	CORPUS CHRISTI TERMINAL CONDENSATE SPLITTER	TX	118270 AND PSDTX1398	4/10/2015	Petroleum Liquids Storage in Fixed Roof Tanks	-	3.4	MMBbl/yr/tank	Volatile Organic Compounds (VOC)	Temperature reduced to maintain volatile organic compound (VOC) vapor pressure < 0.5 pounds per square inchual (psia) at all times.	15.78	TONS/YR/TANK
TX-0756	CCI CORPUS CHRISTI CONDENSATE SPLITTER FACILITY	TX	116072 AND PSDTX1388	6/19/2015	Storage Tanks, TK-107, TK-108, TK-109, 42.005	-	60300	gal/hr	Volatile Organic Compounds (VOC)	Material w/vapor press < 0.5 psia. Tanks are required to be painted white and be equipped with submerged fill pipes	4.2	LB/HR
TX-0756	CCI CORPUS CHRISTI CONDENSATE SPLITTER FACILITY	TX	116072 AND PSDTX1388	6/19/2015	Storage Tanks, TK-110, TK-111, TK-112	-	57960	gal/hr	Volatile Organic Compounds (VOC)	Tanks are required to be painted white and be equipped with submerged fill pipes	3.07	LB/HR
TX-0756	CCI CORPUS CHRISTI CONDENSATE SPLITTER FACILITY	TX	116072 AND PSDTX1388	6/19/2015	Storage Tanks, TK-113, TK-114, and TK-115	-	47000000	gal/yr/tank	Volatile Organic Compounds (VOC)	Tanks are required to be painted white and be equipped with submerged fill pipes	0.85	LB/HR
TX-0772	PORT OF BEAUMONT PETROLEUM TRANSLOAD TERMINAL (PBPTT)	TX	118901, GHGPSDTX108 AND PSDTX1	11/6/2015	Petroleum Liquids Storage in Fixed Roof Tanks	-	47.62	BBL/YR	Volatile Organic Compounds (VOC)	Tank uses submerged fill and is aluminum in color.	0.01	T/YR
TX-0808	HOUSTON FUEL OIL TERMINAL	TX	5783, N57M1, O1093	9/2/2016	Storage Tank	-	0	-	Volatile Organic Compounds (VOC)	Insulated, submerged fill, painted white	0.1	T/YR
TX-0808	HOUSTON FUEL OIL TERMINAL	TX	5783, N57M1, O1093	9/2/2016	Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	Painted white with mechanical shoe primary seal, rim-mounted secondary seal, slotted guide-poles with controls, gasketed deck penetrations for legs.	6.43	T/YR
TX-0818	FUEL OIL TERMINAL	TX	5783, N57M2	4/26/2017	Storage Tanks	-	45000	BBL/H	Volatile Organic Compounds (VOC)	Painted white with mechanical shoe primary seal, rim-mounted secondary seal, slotted guide-poles with controls, gasketed floating roof deck fittings, drain dry design, and a cable suspended system in lieu of deck legs (thereby, eliminating deck penetrations for the legs)	90.36	T/YR
TX-0818	FUEL OIL TERMINAL	TX	5783, N57M2	4/26/2017	STORAGE TANKS MSS	-	0	-	Volatile Organic Compounds (VOC)	Tank roof landings are controlled using Carbon Adsorption system with two canisters in series and hourly breakthrough monitoring.	19.37	T/YR
TX-0825	PASADENA TERMINAL	TX	142261 AND N254	7/14/2017	Internal floating roof storage tanks	-	0	-	Volatile Organic Compounds (VOC)	IFR equipped with a primary and secondary seal, painted white, and has drain dry floor design.	165	T/YR
TX-0825	PASADENA TERMINAL	TX	142261 AND N254	7/14/2017	Internal floating roof storage tanks maintenance, startup, and shutdown	-	0	-	Volatile Organic Compounds (VOC)	Roof landings will be routed to control device for a 99.8% destruction efficiency and refilling losses will be controlled by a portable vapor combustor unit with a 99.5% collection efficiency.	26.28	T/YR
TX-0825	PASADENA TERMINAL	TX	142261 AND N254	7/14/2017	Horizontal fixed roof storage tanks	-	0	-	Volatile Organic Compounds (VOC)	Painted white, has submerged fill	0.37	T/YR
TX-0825	PASADENA TERMINAL	TX	142261 AND N254	7/14/2017	Horizontal fixed roof storage tanks maintenance, start up, and shutdown	-	0	-	Volatile Organic Compounds (VOC)	Degassing and refilling losses will be controlled by vapor combustor with a 99.5% destruction efficiency.	26.28	T/YR
TX-0844	OXY INGLESIDE ENERGY CENTER	TX	122362 AND PSDTX1430M1	7/25/2018	STORAGE TANKS MSS	-	0	-	Volatile Organic Compounds (VOC)	Roof landings will be routed to control device for a 99.5% destruction efficiency and refilling losses will be controlled by a portable vapor combustor unit with a 99.5% collection efficiency.	0	-
TX-0844	OXY INGLESIDE ENERGY CENTER	TX	122362 AND PSDTX1430M1	7/25/2018	STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	- Internal floating roof (IFR) - Mechanical shoe or liquid mounted primary seal - Submerged fill - Drain-dry design - Painted white	14	T/YR
TX-0852	CORPUS CHRISTI WATERFRONT TERMINAL	TX	145717 AND PSDTX1516	1/2/2019	IFR TANKS	-	0	-	Volatile Organic Compounds (VOC)	IFR equipped with a primary and secondary seal, painted white, and has drain dry floor design. Vapors are routed to a vapor combustion unit.	0	-
*AK-0084	DONLIN GOLD PROJECT	AK	AQ0934CPT01	6/30/2017	Fuel Tanks	Diesel	0	-	Volatile Organic Compounds (VOC)	Submerged Fill	1.7	TPY
FL-0346	LAUDERDALE PLANT	FL	0110037-011-AC	4/22/2014	Three ULSD fuel oil storage tanks	-	0	-	Volatile Organic Compounds (VOC)	The Department sets BACT for these storage tanks to minimize VOC emissions as the use of pressure relief valves/vapor condensers. In lieu of pressure relief valves/vapor condensers, FPL as an alternative, can use tanks with internal floating roofs or the equivalent to minimize VOC emissions.	0	-
FL-0354	LAUDERDALE PLANT	FL	0110037-013-AC	8/25/2015	Two 3-million gallon ULSD storage tanks	-	0	-	Volatile Organic Compounds (VOC)	Low vapor pressure prevents evaporative losses	0	-
IL-0119	PHILLIPS 66 PIPELINE LLC	IL	6110049	1/23/2015	Distillate Storage Tank (Tank 2001)	-	200000	bbl	Volatile Organic Compounds (VOC)	Low vapor pressure material	0.1	PSIA
IN-0158	ST. JOSEPH ENEGRY CENTER, LLC	IN	141-31003-00579	12/3/2012	EMERGENCY GENERATOR ULSD TANKS	-	550	GALLONS EACH	Volatile Organic Compounds (VOC)	GOOD DESIGN AND OPERATING PRACTICES	0	-
IN-0158	ST. JOSEPH ENEGRY CENTER, LLC	IN	141-31003-00579	12/3/2012	FIRE PUMP ENGINE ULSD TANKS	-	70	GALLONS EACH	Volatile Organic Compounds (VOC)	GOOD CUMBUSTION PRACTICE AND FUEL SPECIFICATION	0	-
IN-0158	ST. JOSEPH ENEGRY CENTER, LLC	IN	141-31003-00579	12/3/2012	VEHICLE DIESEL TANK	-	650	GALLONS	Volatile Organic Compounds (VOC)	GOOD CUMBUSTION PRACTICE AND FUEL SPECIFICATION	0	-
IN-0158	ST. JOSEPH ENEGRY CENTER, LLC	IN	141-31003-00579	12/3/2012	EMERGENCY GENERATOR ULSD TANK	-	300	GALLONS	Volatile Organic Compounds (VOC)	GOOD CUMBUSTION PRACTICE AND FUEL SPECIFICATION	0	-
IN-0273	ST. JOSEPH ENERGY CENTER	IN	141-37912-00579	6/22/2017	DIESEL STORAGE TANK TK11	DIESEL	650	GALLONS	Volatile Organic Compounds (VOC)	THE USE OF GOOD DESIGN AND OPERATING PRACTICES. EACH TANK SHALL UTILIZE A FIXED ROOF.	0	-
IN-0273	ST. JOSEPH ENERGY CENTER	IN	141-37912-00579	6/22/2017	DIESEL STORAGE TANK TK50	DIESEL	5000	GALLONS	Volatile Organic Compounds (VOC)	THE USE OF GOOD DESIGN AND OPERATING PRACTICES. EACH TANK SHALL UTILIZE A FIXED ROOF.	0	-
LA-0276	BATON ROUGE JUNCTION FACILITY	LA	PSD-LA-741(M4)	12/15/2016	Tank 190 (EQT0036 - IFR)	-	0	-	Volatile Organic Compounds (VOC)	Internal floating roof and submerged fill pipe	0	-
LA-0276	BATON ROUGE JUNCTION FACILITY	LA	PSD-LA-741(M4)	12/15/2016	Vertical Fixed Roof Tanks 174, 175, 176	-	0	-	Volatile Organic Compounds (VOC)	Submerged fill pipes and pressure/vacuum vents	0	-

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Methanol Tank TK-2	-	1469	gallons	Volatile Organic Compounds (VOC)	Submerged fill pipe and LAC 33:III.2103	0	-
OK-0153	ROSE VALLEY PLANT	OK	2012-1393-C PSD	3/1/2013	AMINE UNITS - FLASH TANK	NA	20000	BBL/D	Volatile Organic Compounds (VOC)	ROUTE FLASH TANK EMISSIONS TO A HOT OIL HEATER, A REGENERATION HEATER, OR A FLARE.	1.8	TPY
OK-0153	ROSE VALLEY PLANT	OK	2012-1393-C PSD	3/1/2013	CONDENSATE TANKS	NA	9198000	GAL/YR	Volatile Organic Compounds (VOC)	FLARE	0.82	TPY
OK-0154	MOORELAND GENERATING STA	OK	2008-302-C(M-1)PSD	7/2/2013	DIESEL TANK (2800 GALLON)	NA	2800	GALLONS	Volatile Organic Compounds (VOC)	FIXED-ROOF TANK	0	-
OR-0050	TROUTDALE ENERGY CENTER, LLC	OR	26-0235	3/5/2014	Storage tank	ULSD	0	-	Volatile Organic Compounds (VOC)	Submerged fill line; Vapor balancing during tank filling.	0	-
TX-0728	PEONY CHEMICAL MANUFACTURING FACILITY	TX	118239, N200	4/1/2015	Diesel and lube oil tanks	-	10708	gallons/yr	Volatile Organic Compounds (VOC)	Low vapor pressure fuel, submerged fill, white tank	0.02	LB/H
TX-0799	BEAUMONT TERMINAL	TX	18295, PSDTX1466, GHGPSDTX139	6/8/2016	Storage Tanks -IFR	-	0	-	Volatile Organic Compounds (VOC)	IFR tanks (EPNs 169, 216, 218, 221, 230, 233, 234, 236, and 255) have a liquid-mounted primary seal. IFR tanks (EPNs 396 and 397) have a vapor-mounted primary seal and rim-mounted secondary seal. Methanol tanks (EPNs 300, 301, 302) have a mechanical shoe primary seal and rim-mounted secondary seal. All of these tanks are greater than 25 Mgal and store liquids with a TVP less than 11.0 psia, are painted white, and use submerged fill.	109.17	T/YR
TX-0799	BEAUMONT TERMINAL	TX	18295, PSDTX1466, GHGPSDTX139	6/8/2016	Storage Tanks - EFR	-	0	-	Volatile Organic Compounds (VOC)	All 68 EFR tanks are greater than 25 Mgal and store liquids with a TVP less than 11.0 psia. They have a mechanical shoe primary seal, rim-mounted secondary seal, and slotted guide poles with gasketed sliding covers pole sleeves, and pole wipers. All EFR tanks are painted white, with the exception of Tank 167, which is currently out of service. Tank 167 will be painted white before it is returned to service. The 37 new tanks have drain dry design.	384.37	T/YR
TX-0799	BEAUMONT TERMINAL	TX	18295, PSDTX1466, GHGPSDTX139	6/8/2016	Storage Tanks - fixed roof	-	0	-	Volatile Organic Compounds (VOC)	Fixed-roof tanks (EPNs 168, 222, 225, 227,229, 254, 256, 257, 258, 259, 475, and 476) will use submerged fill and have white exterior surfaces. Fuel tanks (EPN DTK01 and GTK01) are horizontal fixed-roof design and will use submerged fill and have white or aluminum exterior surfaces.	72.5	T/YR
TX-0813	ODESSA PETROCHEMICAL PLANT	TX	16963, PSDTX1478, GHGPSDTX148	11/22/2016	Petroleum Liquid Storage in Fixed Roof tanks	-	0	-	Volatile Organic Compounds (VOC)	Submerged fill pipe, reflective or white exterior paint.	0.01	T/YR
TX-0840	CORPUS CHRISTI TERMINAL	TX	32769 AND PSDTX1258M3	10/31/2018	Heavy oil storage	-	0	-	Volatile Organic Compounds (VOC)	1 fixed roof tank has storage of heavy oil (EPN: T-1334) with VP < 0.5 psia, painted white and equipped with submerged fill pipe.	0	-
TX-0840	CORPUS CHRISTI TERMINAL	TX	32769 AND PSDTX1258M3	10/31/2018	TANK MSS	-	0	-	Volatile Organic Compounds (VOC)	VCU	0	-
TX-0847	VALERO PORT ARTHUR REFINERY	TX	6825A, N65, PSDTX49M1, GHGPSDT	9/16/2018	External Floating roof storage tanks	-	45000	BBL/HR	Volatile Organic Compounds (VOC)	Tanks will be equipped with Mechanical shoe seal with a secondary rim mounted seal. Tanks equipped with slotted guidepoles with gasketed sliding covers, either pole sleeves or floats, and wipers. Tanks will also be constructed with drain dry design. These tanks will be equipped with welded deck seams since the tank will store products with VOC vapor pressure of 0.5 psia or greater.	0	-
TX-0850	CORPUS CHRISTI TERMINAL	TX	32769, PSDTX1258M3	7/15/2018	Heavy oil storage in fixed roof tank	-	0	-	Volatile Organic Compounds (VOC)	Storage of heavy oil (EPN: T-1334) in a fixed roof tank with VP < 0.5 psia, painted white and equipped with submerged fill pipe.	0	-
CA-1180	CHEVRON PRODUCTS CO	CA	22722	8/24/2011	Recovered oil storage tank, external floating roof with dome	-	0	-	Volatile Organic Compounds (VOC)	Requires domes on external floating roof tanks.	0	-
IL-0115	WOOD RIVER REFINERY	IL	6050052	1/23/2015	STORAGE TANKS A-033-1 AND A-037-1	-	83000	BBL, EACH	Volatile Organic Compounds (VOC)	IFR; PRIMARY LIQUID-MOUNTED SEAL AND SECONDARY RIM-MOUNTED SEAL.	4.7	TONS/YEAR
IL-0118	PHILLIPS 66 PIPELINE LLC	IL	6110049	1/23/2015	Product Storage Tank (Tank 2003)	-	200000	bbl	Volatile Organic Compounds (VOC)	Internal Floating Roof; primary mechanical shoe seal; secondary rim-mounted seal.	0	-
LA-0286	DEEPWATER PORT COMPLEX	LA	PSD-LA-796	7/30/2015	TANK 6413 (22-14, EQT 48)	-	0	-	Volatile Organic Compounds (VOC)	EXTERNAL FLOATING ROOF	0	-
LA-0286	DEEPWATER PORT COMPLEX	LA	PSD-LA-796	7/30/2015	TANK 6415 (23-14, EQT 49)	-	0	-	Volatile Organic Compounds (VOC)	EXTERNAL FLOATING ROOF	0	-
LA-0286	DEEPWATER PORT COMPLEX	LA	PSD-LA-796	7/30/2015	TANK 6418 (24-14, EQT 50)	-	0	-	Volatile Organic Compounds (VOC)	EXTERNAL FLOATING ROOF	0	-
LA-0286	DEEPWATER PORT COMPLEX	LA	PSD-LA-796	7/30/2015	TANK 6419 (25-14, EQT 51)	-	0	-	Volatile Organic Compounds (VOC)	EXTERNAL FLOATING ROOF	0	-
LA-0286	DEEPWATER PORT COMPLEX	LA	PSD-LA-796	7/30/2015	TANK 6420 (26-14, EQT 52)	-	0	-	Volatile Organic Compounds (VOC)	EXTERNAL FLOATING ROOF	0	-
LA-0286	DEEPWATER PORT COMPLEX	LA	PSD-LA-796	7/30/2015	TANK 6421 (27-14, EQT 53)	-	0	-	Volatile Organic Compounds (VOC)	EXTERNAL FLOATING ROOF	0	-
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Product Methanol Tank	-	465.8	MM GALS/YR	Volatile Organic Compounds (VOC)	Internal Floating Roof (IFR) Tank	0.27	LB/H
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	diesel tanks (2 units)	-	54144	gallons (each)	Volatile Organic Compounds (VOC)	Equipped with fixed roofs	0	-
OK-0175	WILDHORSE TERMINAL	OK	2016-1066-C PSD	6/29/2017	250,000 BBL EFR TANKS	NA	10.5	MMBBL/YR/TANK	Volatile Organic Compounds (VOC)	Equipped with EFRs, primary mechanical shoe seals, secondary seals, and drain-dry design.	6.43	TONS/YR/TANK
OK-0175	WILDHORSE TERMINAL	OK	2016-1066-C PSD	6/29/2017	350,000 BBL EFR TANKS	NA	14.7	MMBBL/YR/TANK	Volatile Organic Compounds (VOC)	Equipped with EFRs, primary mechanical shoe seals, and drain-dry design.	7.47	TON/YR/TANK
OK-0175	WILDHORSE TERMINAL	OK	2016-1066-C PSD	6/29/2017	500,000 BBL EFR TANKS	NA	21	MMBBL/YR/TANK	Volatile Organic Compounds (VOC)	Equipped with EFR, primary mechanical shoe seals, secondary seals, and drain-dry design.	8.78	TON/YR/TANK
OK-0175	WILDHORSE TERMINAL	OK	2016-1066-C PSD	6/29/2017	20,000 BBL EFR TANK	NA	840	MMBBL/YR	Volatile Organic Compounds (VOC)	Equipped with EFR, primary mechanical shoe seal, secondary seal, and drain-dry design.	2.16	TON/YR
OK-0176	BPV GATHERING AND MARKETING CUSHING STATION	OK	2016-1247-C PSD	7/19/2017	250,000 BBL EFR TANKS	NA	54450000	BBL/TANK/YEAR	Volatile Organic Compounds (VOC)	Equipped with EFR, primary mechanical shoe seals, secondary seals, and drain-dry design.	217.24	TONS/YEAR/FACILITY
*TX-0637	GALENA PARK TERMINAL	TX	N168	10/15/2013	Petroleum Liquid Storage in loating Roof Tanks	not applicable	1300000	bbl	Volatile Organic Compounds (VOC)	Welded decks, mechanical shoe primary and rim-mounted secondary seal for stock with VP>0.10 psia. Control is required during loading of marine vessels and during roof landings for VP>0.10 psia.	14.37	TPY

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*TX-0653	TEXAS DOCK AND RAIL	TX	106594/PSDTX1324	2/18/2014	Petroleum Liquid Marketing; Petroleum Liquid Storage in Floating Roof Tanks	Natural Gas as pilot fuel for VCU	250	Mbbl	Volatile Organic Compounds (VOC)	For storage of VOC in floating roof tanks, the tanks will have welded decks, mechanical shoe primary and rim-mounted secondary seal for VOC with a vapor pressure >0.5 psia. Floating roof tank landings are limited in frequency and duration.	11.23	TPY
TX-0797	CORPUS CHRISTI TERMINAL	TX	32769/ PSDTX1258M2/ 0-1238	5/4/2016	Petroleum Liquid Storage in Floating Roof Tanks	-	146	MM BBL / YR	Volatile Organic Compounds (VOC)	Petroleum products are stored in floating roof tanks.	24.37	T/YR
TX-0812	CRUDE OIL PROCESSING FACILITY	TX	9342A, 9343A, PSDTX963M1, GHGP	10/31/2016	Petroleum Liquid Storage in Floating Roof tanks	-	0	-	Volatile Organic Compounds (VOC)	Internal floating roof. Integrity of the floating roof seal must be verified through periodic visual inspections and seal gap measurements. The tank must be constructed with a drain dry sump, and an available connection to a control device.	3.04	T/YR
TX-0835	CHANNELVIEW TERMINAL	TX	N262	4/13/2018	IFR STORAGE TANK	-	31830071	BBL/YR	Volatile Organic Compounds (VOC)	IFR tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. During tank landings, the vapor space is routed to a vapor recovery system and limited to 30% LEL. Store materials with less than 11.0 psia.	0	-
*WI-0261	ENBRIDGE ENERGY - SUPERIOR TERMINAL	WI	13-DCF-129	6/12/2014	EG7 - Diesel Emergency Electric Generator w/ tank	Diesel fuel oil	197	BHP	Volatile Organic Compounds (VOC)	NSPS engine [Tier 3 emergency engine]. EG7 Storage tank, conventional fuel oil storage tank, good operating practices; limiting leakage, spills. (FT01). Engine limited to 200 hours / year (total) and NSPS requirements.	3.75	GRAM / HP-HR
WY-0071	SINCLAIR REFINERY	WY	MD-12620	10/15/2012	Storage Tank	-	100	MMbbls	Volatile Organic Compounds (VOC)	External Floating Roof Tank	0	-
AK-0083	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT06	1/6/2015	Two (2) Methyl-diethanol Amine (MDEA) Storage Tanks	-	158420	gallons	Volatile Organic Compounds (VOC)	Submerged Fill Design	0.002	TONS/YEAR
AR-0124	EL DORADO SAWMILL	AR	2348-AOP-R0	8/3/2015	ELEVEN OIL STORAGE TANKS SN-14	-	0	-	Volatile Organic Compounds (VOC)	ENCLOSED TANKS, TANKS ARE LIGHT COLOR	0.3	LB/H
AR-0124	EL DORADO SAWMILL	AR	2348-AOP-R0	8/3/2015	THREE DIESEL STORAGE TANKS SN-15	-	0	-	Volatile Organic Compounds (VOC)	TANKS ARE LIGHT COLOR	0.4	LB/H
FL-0328	ENI - HOLY CROSS DRILLING PROJECT	FL	OCS-EPA-R4007	10/27/2011	Storage Tanks	Diesel	0	-	Volatile Organic Compounds (VOC)	Use of good maintenance practices based on the current manufacturer's specifications for each tank	0.27	TONS PER YEAR
IA-0106	CF INDUSTRIES NITROGEN, LLC - PORT NEAL NITROGEN COMPLEX	IA	PN 13-037	7/12/2013	Methyl-diethanol Amine (MDEA) Storage Tank	-	220000	gallons	Volatile Organic Compounds (VOC)	Nitrogen Gas Blanket	0.1	TONS/YR
IN-0179	OHIO VALLEY RESOURCES, LLC	IN	147-32322-00062	9/25/2013	ONE (1) DIESEL EXHAUST FLUID (DEF) TANK	-	100	TONS UAN	Volatile Organic Compounds (VOC)	WHITE TANK SHELL, SUBMERGED FILL	0	-
TX-0613	EAST HOUSTON TERMINAL	TX	94433 AND N134	4/23/2012	Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	Internal floating roof with welded seams, mechanical shoe primary seal and rim mounted secondary seal	9	LB/H
TX-0613	EAST HOUSTON TERMINAL	TX	94433 AND N134	4/23/2012	Storage Tanks-MSS	-	0	-	Volatile Organic Compounds (VOC)	Vapor space must be routed to control at all times if liquid vapor pressure>0.1 psia. Roof cannot stay landed for more than 3 days. Control may be relaxed if all liquid is removed (drain dry tanks) and VOC concentration 5000 ppmv or less.	30	LB/H
TX-0663	JACKSON COUNTY GAS PLANT	TX	PSDTX1264	5/25/2012	Fixed Roof Tanks	-	0	-	Volatile Organic Compounds (VOC)	White, submerged fill	0	-
TX-0682	GALENA PARK TERMINAL	TX	101199 & N158	6/12/2013	Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	Vapor space degassing will be directed to control until VOC level in the tank is less than 5,000 ppmv (2,000 if vented to atmosphere).	5000	PPMV
TX-0684	ENTERPRISE MONT BELVIEU COMPLEX	TX	100091,PSDTX1286 AND N154	11/14/2012	Tanks	-	0	-	Volatile Organic Compounds (VOC)	Proper design and operation of tanks	0.76	LB/H
TX-0783	LBC HOUSTON BAYPORT TERMINAL	TX	123325, N206	2/5/2016	Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	Sixteen tanks have internal floating roofs (IFRs) with welded seams, mechanical shoe primary seals, rim-mounted secondary seals, and welded deck seams. Based on site-specific attributes, the applicant has chosen to control tanks that store benzene or organic materials with a vapor pressure greater than 0.5 psia at the maximum feed temperature or 95°F, whichever is greater. The emissions from these tanks will be routed to a vapor combustor.	0.26	T/YR
TX-0783	LBC HOUSTON BAYPORT TERMINAL	TX	123325, N206	2/5/2016	Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	Twenty-four fixed roof tanks have submerged fill pipes and are painted white. These tanks store material with vapor pressures less than 0.5 psia.	0.01	T/YR
TX-0846	MOTOR VEHICLE ASSEMBLY PLANT	TX	70661, PSDTX1036M1, GHGPSDTX18	9/23/2018	Storage Tanks Very Low Vapor Pressure Non Gasoline Automotive Fluids Gear Lube, Engine Oil, Diesel fuel, Urea, ATF Etc. 20,000 gal each	-	0	-	Volatile Organic Compounds (VOC)	White fixed roof storage tanks equipped with a submerged fill pipe. use of drain dry construction is required to minimize the emissions from tank entry and inspection.	0	-
LA-0301	LAKE CHARLES CHEMICAL COMPLEX ETHYLENE 2 UNIT	LA	PSD-LA-779	5/23/2014	LAC Tank (EQT 1110), Heavy Pygas (HAD) Tank (EQT 1111), and Pentane Drum (EQT 1113)	-	0	-	Volatile Organic Compounds (VOC)	Flare	0	-
LA-0301	LAKE CHARLES CHEMICAL COMPLEX ETHYLENE 2 UNIT	LA	PSD-LA-779	5/23/2014	Wash Oil Tank (EQT 993)	-	393176	GALS/YR	Volatile Organic Compounds (VOC)	Internal Floating Roof	0.16	TPY
LA-0277	COMONIMER-1 UNIT	LA	PSD-LA-814	9/1/2016	Storage Tanks (7 units)	-	0	-	Volatile Organic Compounds (VOC)	Internal Floating roofs (IFR)	0	-
LA-0277	COMONIMER-1 UNIT	LA	PSD-LA-814	9/1/2016	C10+ Storage Tank T12-917	-	88128	gallons	Volatile Organic Compounds (VOC)	Submerged fill pipe	0	-
LA-0290	LAKE CHARLES CHEMICAL COMPLEX GTL LAB-2 UNIT	LA	PSD-LA-778	5/23/2014	Storage Tank NT-1 (EQT 625)	-	58	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	2.66	TPY
LA-0290	LAKE CHARLES CHEMICAL COMPLEX GTL LAB-2 UNIT	LA	PSD-LA-778	5/23/2014	Storage Tank NT-3 (EQT 626)	-	34.11	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	1.54	TPY
LA-0290	LAKE CHARLES CHEMICAL COMPLEX GTL LAB-2 UNIT	LA	PSD-LA-778	5/23/2014	Storage Tank NT-4 (EQT 627)	-	58.09	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	2.66	TPY
LA-0290	LAKE CHARLES CHEMICAL COMPLEX GTL LAB-2 UNIT	LA	PSD-LA-778	5/23/2014	Storage Tank NT-7 (EQT 628)	-	3.39	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	0.15	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	GTLBO XLN Grade Finished Product Tanks (EQT 789; 790)	-	45.3	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	1.06	TPY

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	GTLBO LN Grade Finished Product Tanks (EQT 791; 792)	-	55.3	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	1.34	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	GTLBO MN Grade Finished Product Tanks (EQT 793; 794)	-	27.7	MM GALS	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	0.59	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	GTLBO HN Grade Finished Product Tanks (EQT 795; 796)	-	24.9	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	0.52	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT50R Prover Tanks (EQT 703; 704)	-	230.7	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	5.86	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT50R Storage Tank (EQT 705)	-	230.7	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	6.98	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT60R Prover Tanks (EQT 706; 707)	-	157.7	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	3.86	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT60R Storage Tank (EQT 708)	-	157.7	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	4.84	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT70R Prover Tanks (EQT 709; 710)	-	45.7	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	1.17	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT70R Storage Tank (EQT 711)	-	45.7	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	2.37	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT80R Prover Tanks (EQT 712; 713)	-	94.6	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	2.32	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT50H Prover Tanks (EQT 714; 715)	-	238.6	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	5.85	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT50H Storage Tank (EQT 716)	-	254.4	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	7.74	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT60H Prover Tanks (EQT 717; 718)	-	231.8	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	5.68	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT60H Storage Tank (EQT 719)	-	254.4	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	7.16	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT70H Prover Tanks (EQT 720; 721)	-	251.8	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	6.17	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT50HD Prover Tanks (EQT 722; 723)	-	95.7	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	2.36	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT60HD Prover Tanks (EQT 724; 725)	-	49.4	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	1.23	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	Wax Storage Tank (EQT 726)	-	5.3	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	0.23	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	Product Storage Tank (EQT 727)	-	104.1	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	2.62	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	Product Storage Tank (EQT 728)	-	10	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	0.41	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	Wax Storage Tank (EQT 729)	-	228.6	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	6.16	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT50 Non-Deoiled/Non HDT Wax Tank (EQT 741)	-	44	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	6.28	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT50 HDT and Deoiled Wax Tank (EQT 742)	-	1.39	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	0.2	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT50 HDT Deoiled Blended Wax Tank (EQT 743)	-	25.5	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	2.73	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT60 HDT and Deoiled Wax Tank (EQT 746)	-	4.63	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	2.73	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT50 Emulsion Wax Tank (EQT 744)	-	57	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	1.66	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT60 Non-Deoiled Wax Tank (EQT 745)	-	57	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	1.66	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT60 Blends Wax Tank (EQT 747)	-	2.31	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	0.33	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT70 Non-Deoiled/Non HDT Wax Tank (EQT 748)	-	4.63	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	0.66	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT70 HDT Wax Tank (EQT 749)	-	4.63	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	0.67	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	FT80 Non-Deoiled/Non HDT Wax Tank (EQT 750)	-	9.26	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	1.33	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	Naphtha Storage Tanks (EQT 815, 816,; 817)	-	439	MM GALS/YR	Volatile Organic Compounds (VOC)	Internal floating roof (IFR)	10.85	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	P/O Rundown Tanks (EQT 818, 819, 820,; 821)	-	202	MM GALS/YR	Volatile Organic Compounds (VOC)	Internal floating roof (IFR)	0.57	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	Statutory Storage Tank (EQT 826)	-	439	MM GALS/YR	Volatile Organic Compounds (VOC)	Internal floating roof (IFR)	12.38	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	Petroleum Wax Storage Tank (EQT 827)	-	79	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	0.76	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	Fresh Amine Storage Tank (EQT 829)	-	79	MM GALS/YR	Volatile Organic Compounds (VOC)	Fixed roof; best maintenance practices consistent with Sasol's written plan developed pursuant to LAC 33:III.2113	0.004	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	Process Licensor Methanol Tank Nos. 1; 2 (EQT 797; 798)	-	26.8	MM GALS/YR	Volatile Organic Compounds (VOC)	Internal floating roof (IFR)	0.31	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	Storage Tanks Routed to Flare	-	0	-	Volatile Organic Compounds (VOC)	Flare	0	-

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
LA-0303	LAKE CHARLES CHEMICAL COMPLEX ZIEGLER ALCOHOL UNIT	LA	PSD-LA-779	5/23/2014	SSO Storage Tank (EQT 139)	-	35	MM GALS/YR	Volatile Organic Compounds (VOC)	Internal floating roof	1.03	TPY
LA-0303	LAKE CHARLES CHEMICAL COMPLEX ZIEGLER ALCOHOL UNIT	LA	PSD-LA-779	5/23/2014	Alcohol Tank (EQT 173)	-	3.4	MM GALS/YR	Volatile Organic Compounds (VOC)	Internal floating roof	0.26	TPY
LA-0319	LAKE CHARLES CHEMICAL COMPLEX - COMONOMER-1 UNIT	LA	PSD-LA-814	9/1/2016	Storage tanks (7 tanks)	-	0	-	Volatile Organic Compounds (VOC)	Equipped with internal floating roofs (IFR)	0	-
LA-0319	LAKE CHARLES CHEMICAL COMPLEX - COMONOMER-1 UNIT	LA	PSD-LA-814	9/1/2016	storage tank t12-917	-	88128	gal	Volatile Organic Compounds (VOC)	Submerged fill pipe	0	-
*TN-0163	HOLSTON ARMY AMMUNITION PLANT	TN	974192	10/8/2018	Process Tanks	-	0	-	Volatile Organic Compounds (VOC)	-	0.19	TONS/12 MONTHS
TX-0774	BISHOP FACILITY	TX	123216, PSDTX1438 AND GHGPSDTX	11/12/2015	Storage Tanks	-	6	MMgal/yr	Volatile Organic Compounds (VOC)	Submerged fill, white tanks with internal floating roofs.	6.86	TPY
TX-0811	LINEAR ALPHA OLEFINS PLANT	TX	136130 AND N250	11/3/2016	SOCMI Floating Roof Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	A vapor recovery system captures all vapor under tank shell and routes them to a thermal oxidizer. For alpha olefins, product quality considerations dictate the use of a nitrogen blanketing system	0.01	T/YR
TX-0811	LINEAR ALPHA OLEFINS PLANT	TX	136130 AND N250	11/3/2016	SOCMI Fixed Roof Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	Fixed roof tanks: no add-on controls. Volatility of stock limited to 0.10 psia by permit condition. For alpha olefins, product quality considerations dictate the use of a nitrogen blanketing system.	0.17	T/YR
TX-0815	PORT ARTHUR ETHANE SIDE CRACKER	TX	122353, PSDTX1426, GHGPSDTX114	1/17/2017	STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	THERMAL OXIDIZER	0	-
TX-0823	LYONDELL CHEMICAL BAYPORT CHOATE PLANT	TX	137789 AND N244	6/7/2017	STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	Vessels will be equipped with suspended IFR for materials of vapor pressures greater than 0.5 psia and less than 11.0 psia.	4.72	T/YR
TX-0823	LYONDELL CHEMICAL BAYPORT CHOATE PLANT	TX	137789 AND N244	6/7/2017	STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	Storage of a by-product stream mixture of light liquids will be constructed of stainless steel to minimize corrosive effects from water in the stored materials; these vessels are equipped with fixed roofs, coated with black epoxy to minimize external corrosion and their emissions will be flared.	0	-
TX-0843	VICTORIA PLANT	TX	PSDTX1079M2, GHGPSDTX145M1	6/30/2018	PROCESS VESSELS AND TANKS	-	0	-	Volatile Organic Compounds (VOC)	Minimum Control for Vertical Fixed Roof (VFR) Tanks a) All surfaces exposed to the sun are painted white b) Submerged fill c) True Vapor Pressure (TVP) of contents less than 11 psia. For VFR tank contents TVP greater than 0.5 psia and tank capacity capacity greater than or equal to 25,000 gallons vent to flare with minimum DRE of 98%.	41	T/YR
TX-0872	CONDENSATE SPLITTER FACILITY	TX	118270 PSDTX1398M1 GHGPSDTX62	10/31/2019	IFR tanks with equal or less than 0.5 psia VP (Routine)	-	4	MBBL/YR	Volatile Organic Compounds (VOC)	Equipped with welded decks and permanent submerged fill pipes. Designed with a mechanical shoe seal system and drain dry sump. Seal visual inspections required via 40 CFR §60.113b.	5.65	LB/H
TX-0872	CONDENSATE SPLITTER FACILITY	TX	118270 PSDTX1398M1 GHGPSDTX62	10/31/2019	IFR tanks with equal or greater than 0.5 psia VP (Routine)	-	9	MBBL/YR	Volatile Organic Compounds (VOC)	Equipped with welded decks and permanent submerged fill pipes. Designed with a mechanical shoe seal system and drain dry sump. Seal visual inspections required via 40 CFR §60.113b.	5.65	LB/H
TX-0872	CONDENSATE SPLITTER FACILITY	TX	118270 PSDTX1398M1 GHGPSDTX62	10/31/2019	IFR Storage Tank MSS	-	0	-	Volatile Organic Compounds (VOC)	Route to MSSVCU/PORTVCU until 10,000 ppmv of VOC is obtained. 4 maximum landings per year per tank. Maximum 15,000 bbl/hr fill rate	0	-
TX-0879	MOTIVA PORT ARTHUR TERMINAL	TX	7238 AND PSDTX154B	2/19/2020	Paraxylene Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	Internal Floating Roof storage tank equipped with mechanical shoe primary seal and rim-mounted secondary seal. Painted white with drain-dry design	0	-
TX-0879	MOTIVA PORT ARTHUR TERMINAL	TX	7238 AND PSDTX154B	2/19/2020	BENZENE TANKS	-	0	-	Volatile Organic Compounds (VOC)	Internal Floating Roof storage tank equipped with mechanical shoe primary seal and rim-mounted secondary seal. Painted white with drain-dry design	0	-
TX-0879	MOTIVA PORT ARTHUR TERMINAL	TX	7238 AND PSDTX154B	2/19/2020	AROMATICS IMPORT TANK	-	0	-	Volatile Organic Compounds (VOC)	External Floating Roof storage tank equipped with mechanical shoe primary seal and rim-mounted secondary seal. Painted white with drain-dry design	0	-
TX-0879	MOTIVA PORT ARTHUR TERMINAL	TX	7238 AND PSDTX154B	2/19/2020	FLOATING ROOF TANK MSS	-	0	-	Volatile Organic Compounds (VOC)	Unless specified below, route to appropriate control device when degassing. Control must be maintained until the VOC concentration is less than 10,000 ppmv VOC (or equivalent for non-VOCs). If there is any standing liquid within the tank, and the tank is opened to the atmosphere or ventilated, the vapor stream must be controlled until there is no standing liquid or the VOC vapor pressure is less than 0.02 psia. Route to control device during roof refloating if emissions from filling tanks without degassing and cleaning is > 5tpy. In this case, if controlling through fixed roof vent, route to control device during entire tank refill. New tanks must be designed to be drain dry with connections to control vapors under a landed roof. Commence under-roof degassing within 24 hours of landing. Degas every 24 hours unless no standing liquid in tank or vapor pressure of liquid in tank has a VOC partial pressure <0.02 psi.	0	-

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
TX-0879	MOTIVA PORT ARTHUR TERMINAL	TX	7238 AND PSDTX154B	2/19/2020	FLOATING ROOF TANK UNCONTROLLED MSS	-	0	-	Volatile Organic Compounds (VOC)	All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel or closed liquid recovery system unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.	0	-
TX-0879	MOTIVA PORT ARTHUR TERMINAL	TX	7238 AND PSDTX154B	2/19/2020	BALLAST TANK	-	0	-	Volatile Organic Compounds (VOC)	Uninsulated exterior surfaces exposed to the sun is painted white. Slotted guide pole fittings must have gasketed cover and has a float and wiper. Primary seal is mechanical shoe, secondary seal is rim mounted.	0	-
TX-0887	MIDLAND PLAINS MARKETING TERMINAL	TX	157087 AND PSDTX1568	4/7/2020	External Floating Roof Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	white uninsulated exterior surfaces are fitted with mechanical-shoe primary seals and rim-mounted secondary seals.	0	-
TX-0887	MIDLAND PLAINS MARKETING TERMINAL	TX	157087 AND PSDTX1568	4/7/2020	Tank MSS	-	0	-	Volatile Organic Compounds (VOC)	During tank roof landing and refilling, the emissions are routed to the temporary flare or liquid vapor recovery unit with an equal or greater than 98% destruction efficiency for C3+ VOC.	0	-
*AK-0085	GAS TREATMENT PLANT	AK	AQ1524CPT01	8/13/2020	Fuel Tanks	ULSD	0	-	Volatile Organic Compounds (VOC)	Submerged Fill	0.59	TPY
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Naphtha product tanks	-	0	-	Volatile Organic Compounds (VOC)	Tanks shall have an internal floating roof. Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit.	1.15	TONS
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Diesel product tanks	-	0	-	Volatile Organic Compounds (VOC)	Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit.	2.29	TONS
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Swing product tank T6	-	0	-	Volatile Organic Compounds (VOC)	Tank shall have an internal floating roof. Tank shall use a white shell. Tank shall use submerged filling. Tank shall use good maintenance practices as described in the permit.	1.15	TONS
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Residue tanks	-	0	-	Volatile Organic Compounds (VOC)	Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit.	0.0001	TONS
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Vacuum Gas Oil Tanks	-	0	-	Volatile Organic Compounds (VOC)	Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit.	0.175	TONS
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Slop Tank T16	-	0	-	Volatile Organic Compounds (VOC)	Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit. Emissions shall be controlled by the LP Flare	305467	KGAL
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Diesel fuel tank T17	-	0	-	Volatile Organic Compounds (VOC)	Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit.	0.0114	TONS
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Non-phenolic sour water tanks	-	0	-	Volatile Organic Compounds (VOC)	VOC emissions shall be controlled by the Sulfur Block (SB) Flare. Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit.	462829	KGAL
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Phenolic sour water tank T21	-	0	-	Volatile Organic Compounds (VOC)	VOC emissions shall be controlled by the Sulfur Block (SB) Flare. Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit.	4628	KGAL
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Stripped non-phenolic sour water tank T22	-	0	-	Volatile Organic Compounds (VOC)	Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit.	0.48	TONS
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Stripped phenolic sour water tank T23	-	0	-	Volatile Organic Compounds (VOC)	Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit.	0.48	TONS
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Amine Tanks	-	0	-	Volatile Organic Compounds (VOC)	Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit.	0.48	TONS
*IN-0318	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Emergency engine fuel tanks	-	0	-	Volatile Organic Compounds (VOC)	Tanks shall use a white shell. Tanks shall use submerged filling. Tanks shall use good maintenance practices as described in the permit.	0.0114	TONS
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 15-02 - Gasoline Storage Tanks #1 ; #2	-	2000	gal combined	Volatile Organic Compounds (VOC)	The gasoline storage tanks (EP 15-02) shall be equipped with a permanent submerged fill pipe.	0	-
KY-0110	NUCOR STEEL BRANDENBURG	KY	V-20-001	7/23/2020	EP 16-01 - Cleaning Tanks #1 - #16	-	115	gal/yr	Volatile Organic Compounds (VOC)	Each cleaner shall be equipped with a cover.	0.52	TON/YR
TX-0861	BUCKEYE TEXAS PROCESSING CORPUS CHRISTI FACILITY	TX	109923, PSDTX1502, AND GHGPSDT	8/29/2019	FIXED ROOF TANKS	-	0	-	Volatile Organic Compounds (VOC)	Painted White with Submerged Fill	0	-
TX-0861	BUCKEYE TEXAS PROCESSING CORPUS CHRISTI FACILITY	TX	109923, PSDTX1502, AND GHGPSDT	8/29/2019	IFR TANKS	-	0	-	Volatile Organic Compounds (VOC)	Painted White, Submerged Fill, Drain-Dry Design, Mechanical Primary Seal	0	-
TX-0864	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	TX	N266, PSDTX1542, GHGPSDTX183	9/9/2019	Fixed Roof Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	painted white, submerged fill	0	-
TX-0888	ORANGE POLYETHYLENE PLANT	TX	155952 PSDTX1556 GHGPSDTX192	4/23/2020	FIXED ROOF STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	submerge fill piping or bottom fill piping and painted white	0	-
TX-0888	ORANGE POLYETHYLENE PLANT	TX	155952 PSDTX1556 GHGPSDTX192	4/23/2020	Internal Floating Roof Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	Use of a welded deck construction and a seal configuration that includes a mechanical shoe primary seal and a rim mounted secondary seal.	0	-
*LA-0344	BATON ROUGE JUNCTION FACILITY	LA	PSD-LA-741(M6)	5/29/2019	Tank 174	-	0	-	Volatile Organic Compounds (VOC)	Internal floating roof (IFR)	0	-

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*LA-0356	GARYVILLE REFINERY	LA	PSD-LA-822(M2)	9/27/2019	Lt. Sour Naphtha Surge Tank and Sour Water Storage Tank	-	0	-	Volatile Organic Compounds (VOC)	IFR	0	-
*OK-0180	CUSHING TERMINAL	OK	2015-1352-C(M-3)PSD	8/27/2019	Thirty (30) 270,000-bbl EFR Crude Oil Storage Tanks	NA	6445918	BBL/TANK/YR	Volatile Organic Compounds (VOC)	EFR tanks equipped with primary mechanical shoe seal and a secondary seal. Drain-dry design.	109.5	TPY
*OK-0180	CUSHING TERMINAL	OK	2015-1352-C(M-3)PSD	8/27/2019	Seventeen (17) 270,000-bbl EFR Crude Oil Storage Tanks	NA	6445918	BBL/TANK/YR	Volatile Organic Compounds (VOC)	EFR tanks equipped with primary mechanical seal and secondary seal. Drain-dry design.	64.2	TPY
*OK-0181	WILDHORSE TERMINAL	OK	2016-1066-C(M-1)PSD	9/11/2019	20000 bbl IFR TANK	NA	1000000	BBL PER YR	Volatile Organic Compounds (VOC)	Equipped with IFR, primary mechanical shoe seal, and drain-dry design. Normal operations limited to 2.16 tpy. Landings limited to 0.09 tons per event, 0.2 tpy, and 21.15 tpy facility-wide. Cleanings limited to 0.79 tons per event, 0.8 tpy, and 18.90 tpy facility-wide.	2.16	TPY
TX-0871	PORT ARTHUR REFINERY	TX	PSDTX1062M4, GHGPSDTX121,	1/31/2020	Floating roof tanks	-	0	-	Volatile Organic Compounds (VOC)	External floating roof tank. Tanks are required to be painted white. The tanks will have mechanical shoe primary seals, rim-mounted secondary seals, and drain dry construction, and must be designed with a connection to a control device for use during floating roof landings.	0	-
TX-0873	PORT ARTHUR REFINERY	TX	PSDTX1062M3 AND GHGPSDTX121M1	2/4/2020	IFR TANKS STORING; 0.5 PSIA	-	0	-	Volatile Organic Compounds (VOC)	IFR tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. Submerge filled equipped. Drain dry and store material with less than 11.0 psia	0	-
TX-0873	PORT ARTHUR REFINERY	TX	PSDTX1062M3 AND GHGPSDTX121M1	2/4/2020	IFR TANKS VP . 0.5 PSIA	-	509589	BBL/MO	Volatile Organic Compounds (VOC)	IFR tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. Submerge filled equipped. Drain dry and store material with less than 11.0 psia	0	-
TX-0873	PORT ARTHUR REFINERY	TX	PSDTX1062M3 AND GHGPSDTX121M1	2/4/2020	EFR TANKS VP< 0.5 PSIA	-	0	-	Volatile Organic Compounds (VOC)	EFR tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. Submerge filled equipped. Drain dry and store material with less than 11.0 psia	0	-
TX-0873	PORT ARTHUR REFINERY	TX	PSDTX1062M3 AND GHGPSDTX121M1	2/4/2020	EFR TANKS > 0.5 PSIA; 11 PSIA	-	14737040	BBL/MO	Volatile Organic Compounds (VOC)	EFR tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. Submerge filled equipped. Drain dry and store material with less than 11.0 psia	0	-
TX-0873	PORT ARTHUR REFINERY	TX	PSDTX1062M3 AND GHGPSDTX121M1	2/4/2020	HEATED VFR TANK; 0.5 PSIA	-	0	-	Volatile Organic Compounds (VOC)	Temperature monitoring. White insulated exterior surface. Store materials below 0.5 psia. Submerge fill equipped.	0	-
TX-0873	PORT ARTHUR REFINERY	TX	PSDTX1062M3 AND GHGPSDTX121M1	2/4/2020	FLOATING ROOF TANK DEGASSING	-	0	-	Volatile Organic Compounds (VOC)	Routed to the flare (EPN AROFL). VOC concentration is 10,000 ppm or 10-percent of the LEL Limited hourly and yearly tank degassing. Routed to a flare with a 98-percent minimum DRE VOC concentration not to exceed 10-percent or 10,000 ppm	0	-
TX-0874	PORT ARTHUR REFINERY	TX	PSDTX1062M3, AND GHGPSDTX156	2/4/2020	EFR Storage Tanks1Materials with a VP equal or less than 0.5 psia	-	3.4	MMGAL/YR	Volatile Organic Compounds (VOC)	EFR tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. Submerge filled equipped. Drain dry and store material with less than 0.5 psia	0	-
TX-0874	PORT ARTHUR REFINERY	TX	PSDTX1062M3, AND GHGPSDTX156	2/4/2020	EFR Storage Tanks1Materials with a VP greater than 0.5 psia and less than 11.0 psia	-	0	-	Volatile Organic Compounds (VOC)	EFR tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. Submerge filled equipped. Drain dry and store material with less than 11.0 psia	0	-
TX-0874	PORT ARTHUR REFINERY	TX	PSDTX1062M3, AND GHGPSDTX156	2/4/2020	VFR Storage Tanks1Materials with a VP equal or less than 0.5 psia	-	0	-	Volatile Organic Compounds (VOC)	equipped with submerge fill pipes and uninsulated white exterior.	0	-
TX-0874	PORT ARTHUR REFINERY	TX	PSDTX1062M3, AND GHGPSDTX156	2/4/2020	IFR Storage Tanks1Materials with a VP greater than 0.5 psia and less than 11.0 psia	-	0	-	Volatile Organic Compounds (VOC)	Tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. Submerge filled equipped. Drain dry and store material with less than 11.0 psia	0	-
TX-0891	NEDERLAND TERMINAL	TX	1980, PSDTX1472, AND GHGPSDTX1	7/13/2020	EFR Storage Tanks	-	572	GAL/DAY/TANK	Volatile Organic Compounds (VOC)	Storage of materials greater than 11.0 psia prohibited. IFR tanks are equipped with welded decks, and primary mechanical shoe or liquid mounted and rim-mounted secondary seal systems. New tanks are drain-dry designed. Submerged loading required.	0	-
TX-0891	NEDERLAND TERMINAL	TX	1980, PSDTX1472, AND GHGPSDTX1	7/13/2020	Uncontrolled Floating Roof Storage TanksStanding Idle	-	0	-	Volatile Organic Compounds (VOC)	Minimize emission venting hours. Limited to two tanks venting simultaneously.	0	-
TX-0891	NEDERLAND TERMINAL	TX	1980, PSDTX1472, AND GHGPSDTX1	7/13/2020	IFR Storage Tanks	-	312	GAL/DAY/TANK	Volatile Organic Compounds (VOC)	Storage of materials greater than 11.0 psia prohibited. IFR tanks are equipped with welded decks, and primary mechanical shoe and rim-mounted secondary seal systems. New tanks are drain-dry designed. Submerged loading required.	0	-
*TX-0903	SWEENY REFINERY	TX	5920A, N292, PSDTX103M4	9/9/2020	External Floating roof storage tank (EPN 68-95-91A)	-	0	-	Volatile Organic Compounds (VOC)	EFR tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. Does not have slotted guidepoles and constructed with drain dry design. Stores material <11.0 psia	0	-
IN-0312	LEHIGH CEMENT COMPANY LLC	IN	093-40198-00002	6/27/2019	Diesel tanks	Diesel	1400	GALLONS (EACH)	Volatile Organic Compounds (VOC)	good design and operating practices	0	-
IN-0312	LEHIGH CEMENT COMPANY LLC	IN	093-40198-00002	6/27/2019	Gasoline tank	gasoline	500	gallons	Volatile Organic Compounds (VOC)	submerged fill pipe and Stage I Vapor Control	0	-
KY-0103	LOGAN ALUMINUM, INC.	KY	V-20-004	12/27/2020	EP 155 ; 166 - Cold Mill 4 Storage Tanks: Dirty Coolant ; Clean Coolant	-	0	-	Volatile Organic Compounds (VOC)	Each tank shall be equipped with a permanent submerged fill pipe.	1.82	TON/YR
KY-0103	LOGAN ALUMINUM, INC.	KY	V-20-004	12/27/2020	EP 156 - EP160 - Cold Mill 4 Area Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	Each tank must be equipped with a submerged fill pipe.	0	-
*LA-0363	HOLDEN WOOD PRODUCTS MILL	LA	PSD-LA-834	10/2/2019	Diesel Storage Tank	-	150000	gallons/yr	Volatile Organic Compounds (VOC)	Good Tank Design and Submerged Fill Page.	14000	GAL
*LA-0363	HOLDEN WOOD PRODUCTS MILL	LA	PSD-LA-834	10/2/2019	Gasoline Storage Tank	-	25000	gallons/yr	Volatile Organic Compounds (VOC)	Good Tank Design and Submerged Fill Pipe	6000	GAL
TX-0863	POLYETHYLENE 7 FACILITY	TX	153106 AND N268	9/3/2019	Storage tanks content vapor pressure less than 0.5 psia	-	0	-	Volatile Organic Compounds (VOC)	FLARE	0	-
TX-0863	POLYETHYLENE 7 FACILITY	TX	153106 AND N268	9/3/2019	Storage tanks content vapor pressure greater than or equal to 0.5 psia	-	0	-	Volatile Organic Compounds (VOC)	IFR AND FLARE	0	-

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
TX-0874	PORT ARTHUR REFINERY	TX	PSDTX1062M3, AND GHGPSDTX156	2/4/2020	EFR Storage Tanks1 Materials with a VP equal or less than 0.5 psia	-	3.4	MMGAL/YR	Volatile Organic Compounds (VOC)	EFR tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. Submerge filled equipped. Drain dry and store material with less than 0.5 psia	0	-
TX-0874	PORT ARTHUR REFINERY	TX	PSDTX1062M3, AND GHGPSDTX156	2/4/2020	EFR Storage Tanks1 Materials with a VP greater than 0.5 psia and less than 11.0 psia	-	0	-	Volatile Organic Compounds (VOC)	EFR tanks are equipped with welded decks as well as a mechanical shoe and rim-mounted secondary seal systems. Submerge filled equipped. Drain dry and store material with less than 11.0 psia	0	-
*LA-0358	LAKE CHARLES CHEMICAL COMPLEX - GUERBET ALCOHOLS UNIT	LA	PSD-LA-779(M7)	11/7/2019	External Alcohol Feed Storage Tank (EQT1496)	-	0	-	Volatile Organic Compounds (VOC)	Fixed Roof	0	-
*LA-0359	LAKE CHARLES CHEMICAL COMPLEX - ETHOXYLATION UNITS	LA	PSD-LA-779(M7)	11/7/2019	Product Storage Tanks (EQT1101, EQT1102, EQT1491, EQT1495)	-	0	-	Volatile Organic Compounds (VOC)	Fixed Roofs	0	-
TX-0858	GULF COAST GROWTH VENTURES PROJECT	TX	146425, PSDTX1518, GHGPSDTX170	6/12/2019	Fixed Roof Tanks	-	0	-	Volatile Organic Compounds (VOC)	painted white and employ bottom or submerged fill. Storage tanks with capacities less than 25,000 gallons which store stocks with a VOC vapor pressure of less than 0.50 psia are exempt	0	-
TX-0858	GULF COAST GROWTH VENTURES PROJECT	TX	146425, PSDTX1518, GHGPSDTX170	6/12/2019	Floating Roof Tanks	-	0	-	Volatile Organic Compounds (VOC)	internal floating roof with a welded deck. Floating roof tanks must be designed with a sump whose drain pipe discharges to no more than one diameter above the bottom of the sump, and must be designed with a connection to a control device for use during floating roof landings	0	-
TX-0865	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	TX	N264, PSDTX1540, GHGPSDTX182	9/9/2019	Storage Tanks	-	0	-	Volatile Organic Compounds (VOC)	All tanks contain a material with a VOC partial pressure less than 0.5 psia or have a capacity less than 500 gallons Fixed roof tanks painted white with submerged fill.	0	-
TX-0876	PORT ARTHUR ETHANE CRACKER UNIT	TX	PSDTX1546 AND GHGPSDTX186	2/6/2020	Fixed roof storage tanks	-	0	-	Volatile Organic Compounds (VOC)	painted white with submerged fill.	0	-
TX-0876	PORT ARTHUR ETHANE CRACKER UNIT	TX	PSDTX1546 AND GHGPSDTX186	2/6/2020	Fixed roof storage tank	-	0	-	Volatile Organic Compounds (VOC)	painted white with submerged fill. Storage tank vents to the flare	0	-
TX-0876	PORT ARTHUR ETHANE CRACKER UNIT	TX	PSDTX1546 AND GHGPSDTX186	2/6/2020	Fixed roof storage tank	-	0	-	Volatile Organic Compounds (VOC)	painted white with submerged fill, Storage tank vents to the thermal oxidizer	0	-
TX-0876	PORT ARTHUR ETHANE CRACKER UNIT	TX	PSDTX1546 AND GHGPSDTX186	2/6/2020	Internal floating roof storage tank	-	0	-	Volatile Organic Compounds (VOC)	mechanical shoe primary seal and rim mounted secondary seal. The tanks will be painted white and designed as drain dry.	0	-
TX-0876	PORT ARTHUR ETHANE CRACKER UNIT	TX	PSDTX1546 AND GHGPSDTX186	2/6/2020	Floating roof tank landings	-	0	-	Volatile Organic Compounds (VOC)	Degassing of process vessels may use the plant flare system or a temporary control device. Process vessels must be degassed to an appropriate control device until the measured VOC concentration in the process vessel is verified to be less than 1,200 ppmv VOC.	1200	PPMV
TX-0884	PROPANE DEHYDROGENATION (PDH) UNIT	TX	N272, PSDTX1558, GHGPSDTX193	1/24/2020	STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	submerged fill and have white or aluminum exterior surfaces	0	-
*TX-0889	SWEENY OLD OCEAN FACILITIES	TX	N166M2, PSDTX1566, GHGPSDTX196	8/8/2020	MSS: Frac Tanks	-	0	-	Volatile Organic Compounds (VOC)	Degassing the landed roof to a maximum outlet concentration of 10,000 ppmv, measured as VOC, and maintaining that concentration (or less) until maintenance activities are completed or refilling begins. Manage residual products with vapor pressure >0.1 psia that are removed from tanks as a result of a tank roof landing or MSS activity in a controlled manner. Air movers, vacuum trucks, and frac tanks equipped with vapor controls will be used when handling materials with vapor pressures >0.5 psia. Controlled by carbon canisters. Good operational practices.	100	PPMV
*TX-0889	SWEENY OLD OCEAN FACILITIES	TX	N166M2, PSDTX1566, GHGPSDTX196	8/8/2020	MSS: Tank Roof Landing	-	0	-	Volatile Organic Compounds (VOC)	Controlled by a portable flare or a portable vapor combustor. Degassing the landed roof to a maximum outlet concentration of 10,000 ppmv, measured as VOC, and maintaining that concentration (or less) until maintenance activities are completed or refilling begins. Good operational practices	0	-
TX-0894	CHEVRON PHILLIPS CHEMICAL SWEENY COMPLEX	TX	103832 AND N166M3	10/30/2020	Unit 81 Internal Floating Roof Tanks	-	0	-	Volatile Organic Compounds (VOC)	The IFR tanks will have welded floating roofs, gasketed fittings, and be designed to be drain dry. The IFR tanks will be equipped with a submerged fill line and have a mechanical shoe primary seal and a rim mounted secondary seal. The tanks will be uninsulated and painted white.	0	-
TX-0894	CHEVRON PHILLIPS CHEMICAL SWEENY COMPLEX	TX	103832 AND N166M3	10/30/2020	MSS: Tank Roof Landing (EPN: MSS-CONT)	-	0	-	Volatile Organic Compounds (VOC)	Controls: Minimizing the number and duration of all planned MSS events; Beginning tank degassing with 72 hours after the roof has been landed and the tank completely drained; Degassing tanks, process equipment, and piping with volumes > 85 cubic feet to a maximum outlet concentration of 10,000 ppmv VOC, and maintaining the concentration at or below that value until all maintenance activities are completed or refilling begins; Routing the degassed vapors to a control system capable of reducing emissions by 98%, such as a portable thermal oxidizer or internal combustion engine; and Managing residual products with vapor pressures > 0.5 psia that are removed from equipment and piping as a result of an MSS activity in a controlled manner. Specifically, Chevron Phillips proposes the use of air movers, vacuum trucks, and frac tanks equipped with vapor controls and submerged fill pipes to handle these materials. The emissions generated by the MSS activity of landing the floating roof will be routed to a control system capable of reducing emissions by at least 98%, such as a portable flare or internal combustion unit. This satisfies LAER.	0	-
*TX-0904	MOTIVA POLYETHYLENE MANUFACTURING COMPLEX	TX	156571, PSDTX1564, GHGPSDTX195	9/9/2020	INTERNAL FLOATING ROOF TANKS	-	76735410	GAL/YR	Volatile Organic Compounds (VOC)	Internal floating roof tanks will have a mechanical shoe primary seal and rim mounted secondary seal. The tanks will be painted white and designed as drain dry	0	-

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*TX-0904	MOTIVA POLYETHYLENE MANUFACTURING COMPLEX	TX	156571, PSDTX1564, GHGPSDTX195	9/9/2020	FIXED ROOF TANKS	-	5000	GAL/YR/TANK	Volatile Organic Compounds (VOC)	Fixed roof tanks painted white with submerged fill. Storage tanks are less than 25,000 gallons or store compounds with a VOC vapor pressure of less than 0.5 psia Materials > 0.5 to thermal oxidizer.	0	-
*TX-0904	MOTIVA POLYETHYLENE MANUFACTURING COMPLEX	TX	156571, PSDTX1564, GHGPSDTX195	9/9/2020	FLOATING ROOF TANK LANDINGS	-	0	-	Volatile Organic Compounds (VOC)	Degassing of process vessels may use the plant flare system or a temporary control device. Process vessels must be degassed to an appropriate control device until the measured VOC concentration in the process vessel is verified to be less than 10,000 ppmv VOC.	0	-
*TX-0905	DIAMOND GREEN DIESEL PORT ARTHUR FACILITY	TX	160299, PSDTX1576, GHGPSDTX200	9/16/2020	External floating roof storage tanks	-	0	-	Volatile Organic Compounds (VOC)	Storing materials with true vapor pressure greater than 0.5 psia but less than 11 psia. Tanks will have welded dock construction with mechanical shoe primary seal and rim mounted secondary seal. Tanks will have drain dry design, utilize gasketed slotted guidepoles, submerged fill, and be painted white.	0	-
*TX-0905	DIAMOND GREEN DIESEL PORT ARTHUR FACILITY	TX	160299, PSDTX1576, GHGPSDTX200	9/16/2020	Fixed roof storage tanks	-	0	-	Volatile Organic Compounds (VOC)	Capacities greater than 25,000 gal with vapor pressure <0.5 psia. All fixed roof tanks will utilize submerged fill, will be painted white, and have drain dry design.	0	-
*TX-0905	DIAMOND GREEN DIESEL PORT ARTHUR FACILITY	TX	160299, PSDTX1576, GHGPSDTX200	9/16/2020	Floating roof tank landings	-	0	-	Volatile Organic Compounds (VOC)	Degassing of process vessels may use the plant flare system or a temporary control device. Process vessels must be degassed to an appropriate control device until the measured VOC concentration in the process vessel is verified to be less than 10,000 ppmv VOC.	0	-
*IL-0131	FLANAGAN TERMINAL	IL	19120026	11/20/2020	New Storage Tank	-	360000	Barrels	Volatile Organic Compounds (VOC)	The storage tank will be equipped with an external welded floating roof with rim seals and fittings on the deck of floating roof that are designed meet applicable requirements for floating roof tanks in the NSPS Subpart Kb. A sloped, drain floor. An exterior shell that is painted white. For degassing of the tank, the forced ventilation of exhaust air through manways and other openings on the side of tank shall be controlled by flare or another control device with at least 98 % control of VOM emission	0	-
*IL-0131	FLANAGAN TERMINAL	IL	19120026	11/20/2020	Existing Storage Tanks	-	360000	barrels	Volatile Organic Compounds (VOC)	The storage tank will be equipped with an external welded floating roof with rim seals and fittings on the deck of floating roof that are designed meet applicable requirements for floating roof tanks in the NSPS Subpart Kb. A sloped, drain floor. An exterior shell that is painted white. For degassing of the tank, the forced ventilation of exhaust air through manways and other openings on the side of tank shall be controlled by flare or another control device with at least 98 % control of VOM emission	0	-
*IL-0131	FLANAGAN TERMINAL	IL	19120026	11/20/2020	Sump Tank	-	0	-	Volatile Organic Compounds (VOC)	Designed and operate with a permanent submerged loading pipe or submerged loading. Pressure/vacuum relied valve with a setting of at least 0.8 inches of water column for both pressure and vacuum.	0	-
*PA-0326	SHELL POLYMERS MONACA SITE	PA	04-00740C	2/18/2021	Diesel Fuel Storage Tanks 18,000 gal	-	0	-	Volatile Organic Compounds (VOC)	tank vents controlled by carbon canisters designed to reduce VOC emissions by a minimum 95%	0	-
*TX-0899	LBC HOUSTON BAYPORT TERMINAL	TX	123325 AND N206M2	3/5/2021	STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	internal floating roofs (IFRs) with welded seams, mechanical shoe primary seals, rim-mounted secondary seals, and welded deck seams.	0	-
*TX-0899	LBC HOUSTON BAYPORT TERMINAL	TX	123325 AND N206M2	3/5/2021	STORAGE TANK MSS	-	0	-	Volatile Organic Compounds (VOC)	Tank MSS control will route to a vapor combustor with 99.9% DRE when degassing. Control must be maintained until the VOC concentration is less than 10,000 ppmv VOC (or equivalent for non-VOCs). If there is any standing liquid within the tank, and the tank is opened to the atmosphere or ventilated, the vapor stream must be controlled until there is no standing liquid or the VOC vapor pressure is less than 0.02 psia. Route to control device during roof refloating if emissions from filling tanks without degassing and cleaning is > 5tpy. In this case, if controlling through fixed roof vent, route to control device during entire tank refill. New tanks must be designed to be drain dry with connections to control vapors under a landed roof. Commence under-roof degassing within 24 hours of landing. Degas every 24 hours unless no standing liquid in tank or vapor pressure of liquid in tank has a VOC partial pressure <0.02 psi. These controls meet LAER requirements and BACT.	0	-
*AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	Urea UF-85 Storage Tank	-	0	-	Volatile Organic Compounds (VOC)	Wet Scrubber	0	LB/HR
*AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	MDEA Storage Tanks	MDEA	0	-	Volatile Organic Compounds (VOC)	Submerged Fill Design	0.002	TPY (COMBINED)
*PA-0324	MARCUS HOOK	PA	23-0119J	2/12/2021	Refrigerated storage tanks	-	600000	Barrels	Volatile Organic Compounds (VOC)	Ethane Vapors condensed to a liquid state by a vapor recover system before being hard-piped back to the storage tank.	0	-

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*TX-0899	LBC HOUSTON BAYPORT TERMINAL	TX	123325 AND N206M2	3/5/2021	STORAGE TANK MSS	-	0	-	Volatile Organic Compounds (VOC)	Tank MSS control will route to a vapor combustor with 99.9% DRE when degassing. Control must be maintained until the VOC concentration is less than 10,000 ppmv VOC (or equivalent for non-VOCs). If there is any standing liquid within the tank, and the tank is opened to the atmosphere or ventilated, the vapor stream must be controlled until there is no standing liquid or the VOC vapor pressure is less than 0.02 psia. Route to control device during roof refloating if emissions from filling tanks without degassing and cleaning is > 5tpy. In this case, if controlling through fixed roof vent, route to control device during entire tank refill. New tanks must be designed to be drain dry with connections to control vapors under a landed roof. Commence under-roof degassing within 24 hours of landing. Degas every 24 hours unless no standing liquid in tank or vapor pressure of liquid in tank has a VOC partial pressure <0.02 psi. These controls meet LAER requirements and BACT.	0	-
*TX-0918	CEDAR BAYOU PLANT	TX	123325 AND N206M2	3/5/2021	STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	have internal floating roofs (IFRs) with welded seams, mechanical shoe primary seals, rim-mounted secondary seals, and welded deck seams. Based on site-specific attributes, the applicant has chosen to control tanks that store benzene or organic materials with a vapor pressure greater than 0.5 psia at the maximum fred	0	-
*TX-0918	CEDAR BAYOU PLANT	TX	123325 AND N206M2	3/5/2021	FIXED ROOF STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	fixed roof tanks have submerged fill pipes and are painted white. These tanks store material with vapor pressures less than 0.5 psia.	0	-
*TX-0918	CEDAR BAYOU PLANT	TX	123325 AND N206M2	3/5/2021	STORAGE TANK MSS	-	0	-	Volatile Organic Compounds (VOC)	All tanks will be drain-dry. Vapor combustors will be used to control degassing emissions down to a concentration of 5,000 ppmv. When the tank is idle, degassing will be performed every 24 hours unless there is no standing liquid in the tank or the vapor pressure of the remaining liquid is less than 0.15 psia. Refilling operations will be uncontrolled.	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	250,000 bbl Internal Floating Roof Storage Tanks	-	1260000	GAL/HR/TANK	Volatile Organic Compounds (VOC)	Internal floating roof with a mechanical shoe primary seal and a rim-mounted secondary seal. Tanks must be painted white or unpainted aluminum, utilize submerged fill, and designed to be drain-dry..	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	150,000 bbl Internal Floating Roof Storage Tanks	-	1260000	GAL/HR/TANK	Volatile Organic Compounds (VOC)	Internal floating roof with a mechanical shoe primary seal and a rim-mounted secondary seal. Tanks must be painted white or unpainted aluminum, utilize submerged fill, and designed to be drain-dry	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	100,000 bbl Internal Floating Roof Storage Tanks	-	1260000	GAL/HR/TANK	Volatile Organic Compounds (VOC)	Internal floating roof with a mechanical shoe primary seal and a rim-mounted secondary seal. Tanks must be painted white or unpainted aluminum, utilize submerged fill, and designed to be drain-dry.	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	Internal Floating Roof Storage Tanks MSS	-	0	-	Volatile Organic Compounds (VOC)	Emissions from conditions of standing idle, degassing, controlled forced ventilation, and refilling until the roof is refloated will be vented to a vapor combustor with a VOC destruction efficiency of 99%. Emissions shall be controlled until the VOC vapor space concentration has been verified to be less than or equal to 5,000 ppmv at which time emissions may be vented to the atmosphere uncontrolled. Tanks may be opened without restriction and ventilated without control when there is either no liquid and/or sludge remaining in the tank, or the vapor pressure of the liquid and/or sludge remaining in the tank has a VOC vapor pressure less than 0.02 psia. Controlled emissions from only one floating roof tank containing liquids having a VOC vapor pressure greater than 0.50 psia may be landed at a time. The application represents that two tanks may have uncontrolled venting at any one time. Due to impact concerns, limits were included Tank roof landings at tanks storing full-range straight-run naphtha are limited to one landing at any given time.	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	Fixed Roof Storage Tanks	-	1260000	GAL/HR/TANK	Volatile Organic Compounds (VOC)	Tanks must be painted white or unpainted aluminum, utilize submerged fill, and designed to be drain-dry.	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	Fixed Roof Storage Tanks MSS	-	0	-	Volatile Organic Compounds (VOC)	tanks containing VOC liquids alone or in combination with other liquids shall be depressurized and degassed to control until the vapor space concentration has been verified to be less than or equal to 4,000 ppmv. Tanks may be opened without restriction and ventilated without control when there is either no liquid and/or sludge remaining in the tank, or the vapor pressure of the liquid and/or sludge remaining in the tank has a vapor pressure less than 0.02 psia.	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	Debutanizer, Crude Tower Overhead Drums, Sour Water Flash Drum, Sour Water Flash Tank	-	0	-	Volatile Organic Compounds (VOC)	Flare. Constant pilot flame with continuous monitoring. Compliance with 40 Code of Federal Regulations (CFR) §63.670 specifications required for minimum combustion zone net heating value, the minimum dilution parameter net heating value, and maximum tip velocity to ensure a destruction/removal efficiency (DRE) of at least 98%. Continuous flow monitor and calorimeter required. Air or steam assisted.	0	-
*TX-0936	BILL GREEHEY REFINERY EAST PLANT	TX	2937, PSDTX1023M3	3/29/2022	FIXED ROOF STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	Vertical fixed roof tanks storing low vapor pressure products (vp < 0.5 psia) with submerged fill, painted white.	0	-

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*TX-0936	BILL GREEHEY REFINERY EAST PLANT	TX	2937, PSDTX1023M3	3/29/2022	PROCESS UNITS AND TANKS MSS	-	0	-	Volatile Organic Compounds (VOC)	Process vessel purge gases routed to flares. Process vessels containing liquids with vp > 0.5 psia purged until one of the following (or similar) is met: VOC pp < 0.5 psia, 34,000 ppmv or less, measured as methane, 50% or less of lower explosive limit, and/or 3 times the volume of the vessel has been nitrogen or steam purged. Remaining process fluid reduced through process fluid recovery and flaring, followed by testing with a gas sensor.	0	-
*TX-0936	BILL GREEHEY REFINERY EAST PLANT	TX	2937, PSDTX1023M3	3/29/2022	TANK MSS	-	0	-	Volatile Organic Compounds (VOC)	Drain and degas landed volume for floating roof tanks taken out of service. No more than six floating roof tanks taken out of service and drained and degassed per year. For change of service, land roof, drain tank, and begin refill within 24 hours. Only 3 gasoline tanks in service at any one time. Two roof landings per season (March and September) per tank. Maintain fixed roof tanks only when warranted by inspection.	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	250,000 bbl Internal Floating Roof Storage Tanks	-	1260000	GAL/HR/TANK	Volatile Organic Compounds (VOC)	Internal floating roof with a mechanical shoe primary seal and a rim-mounted secondary seal. Tanks must be painted white or unpainted aluminum, utilize submerged fill, and designed to be drain-dry.	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	150,000 bbl Internal Floating Roof Storage Tanks	-	1260000	GAL/HR/TANK	Volatile Organic Compounds (VOC)	Internal floating roof with a mechanical shoe primary seal and a rim-mounted secondary seal. Tanks must be painted white or unpainted aluminum, utilize submerged fill, and designed to be drain-dry	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	100,000 bbl Internal Floating Roof Storage Tanks	-	1260000	GAL/HR/TANK	Volatile Organic Compounds (VOC)	Internal floating roof with a mechanical shoe primary seal and a rim-mounted secondary seal. Tanks must be painted white or unpainted aluminum, utilize submerged fill, and designed to be drain-dry.	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	Internal Floating Roof Storage Tanks MSS	-	0	-	Volatile Organic Compounds (VOC)	Emissions from conditions of standing idle, degassing, controlled forced ventilation, and refilling until the roof is refloated will be vented to a vapor combustor with a VOC destruction efficiency of 99%. Emissions shall be controlled until the VOC vapor space concentration has been verified to be less than or equal to 5,000 ppmv at which time emissions may be vented to the atmosphere uncontrolled. Tanks may be opened without restriction and ventilated without control when there is either no liquid and/or sludge remaining in the tank, or the vapor pressure of the liquid and/or sludge remaining in the tank has a VOC vapor pressure less than 0.02 psia. Controlled emissions from only one floating roof tank containing liquids having a VOC vapor pressure greater than 0.50 psia may be landed at a time. The application represents that two tanks may have uncontrolled venting at any one time. Due to impact concerns, limits were included Tank roof landings at tanks storing full-range straight-run naphtha are limited to one landing at any given time.	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	Fixed Roof Storage Tanks	-	1260000	GAL/HR/TANK	Volatile Organic Compounds (VOC)	Tanks must be painted white or unpainted aluminum, utilize submerged fill, and designed to be drain-dry.	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	Fixed Roof Storage Tanks MSS	-	0	-	Volatile Organic Compounds (VOC)	tanks containing VOC liquids alone or in combination with other liquids shall be depressurized and degassed to control until the vapor space concentration has been verified to be less than or equal to 4,000 ppmv. Tanks may be opened without restriction and ventilated without control when there is either no liquid and/or sludge remaining in the tank, or the vapor pressure of the liquid and/or sludge remaining in the tank has a vapor pressure less than 0.02 psia.	0	-
TX-0930	CENTURION BROWNSVILLE	TX	147681, PSDTX1522, GHGPSDTX172	10/19/2021	Debutanizer, Crude Tower Overhead Drums, Sour Water Flash Drum, Sour Water Flash Tank	-	0	-	Volatile Organic Compounds (VOC)	Flare. Constant pilot flame with continuous monitoring. Compliance with 40 Code of Federal Regulations (CFR) §63.670 specifications required for minimum combustion zone net heating value, the minimum dilution parameter net heating value, and maximum tip velocity to ensure a destruction/removal efficiency (DRE) of at least 98%. Continuous flow monitor and calorimeter required. Air or steam assisted.	0	-
*TX-0936	BILL GREEHEY REFINERY EAST PLANT	TX	2937, PSDTX1023M3	3/29/2022	FLOATING ROOF STORAGE TANKS	-	0	MBF/YR	Volatile Organic Compounds (VOC)	Internal floating roof tanks with mechanical shoe primary seal, painted white. External floating roof tank painted white with primary mechanical shoe seal and a secondary rim-mounted seal.	0	-
*TX-0936	BILL GREEHEY REFINERY EAST PLANT	TX	2937, PSDTX1023M3	3/29/2022	FIXED ROOF STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	Vertical fixed roof tanks storing low vapor pressure products (vp < 0.5 psia) with submerged fill, painted white.	0	-
*TX-0936	BILL GREEHEY REFINERY EAST PLANT	TX	2937, PSDTX1023M3	3/29/2022	PROCESS UNITS AND TANKS MSS	-	0	-	Volatile Organic Compounds (VOC)	Process vessel purge gases routed to flares. Process vessels containing liquids with vp > 0.5 psia purged until one of the following (or similar) is met: VOC pp < 0.5 psia, 34,000 ppmv or less, measured as methane, 50% or less of lower explosive limit, and/or 3 times the volume of the vessel has been nitrogen or steam purged. Remaining process fluid reduced through process fluid recovery and flaring, followed by testing with a gas sensor.	0	-

RBLC Entries for Volatile Organic Compounds Control from Storage Tanks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*TX-0936	BILL GREEHEY REFINERY EAST PLANT	TX	2937, PSDTX1023M3	3/29/2022	TANK MSS	-	0	-	Volatile Organic Compounds (VOC)	Drain and degas landed volume for floating roof tanks taken out of service. No more than six floating roof tanks taken out of service and drained and degassed per year. For change of service, land roof, drain tank, and begin refill within 24 hours. Only 3 gasoline tanks in service at any one time. Two roof landings per season (March and September) per tank. Maintain fixed roof tanks only when warranted by inspection.	0	-
*AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	MDEA Storage Tanks	MDEA	0	-	Volatile Organic Compounds (VOC)	Submerged Fill Design	0.002	TPY (COMBINED)
*TX-0922	HOUSTON PLANT - 46307	TX	46307, PSDTX1580, N288, GHG202	6/13/2022	FIXED ROOF STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	fixed roof tanks painted white with submerged fill for all tanks containing material with a VOC partial vapor pressure of less than 0.1 psi.	0	-
*TX-0922	HOUSTON PLANT - 46307	TX	46307, PSDTX1580, N288, GHG202	6/13/2022	IFR STORAGE TANKS	-	0	-	Volatile Organic Compounds (VOC)	internal floating roof tank with a vapor mounted primary seal and a secondary seal rim mounted. The tanks will be painted white and designed as drain dry.	0	-
TX-0931	ROEHM AMERICA BAY CITY SITE	TX	165103, PSDTX1596, GPSDTX208	12/16/2021	Tanks	-	0	-	Volatile Organic Compounds (VOC)	White, submerged fill. For all tanks with VOC VP > 0.5 psia, and for all tanks in formaldehyde service, route emissions to VCU	0	-
TX-0933	NACERO PENWELL FACILITY	TX	164137 PSDTX1594 GHGPSDTX207	11/17/2021	Storage Tanks - Floating Roof	-	0	-	Volatile Organic Compounds (VOC)	Floating roof tanks must use an internal floating roof with a mechanical shoe primary seals and with rim mounted secondary seals. Floating roof tanks must be designed as drain dry. The exterior surfaces exposed to the sun are required to be painted white.	0	-

RBLC Entries for Volatile Organic Compounds Control from Equipment Leaks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
IL-0115	WOOD RIVER REFINERY	IL	6050052	1/23/2015	EQUIPMENT LEAKS/FUGITIVE EMISSIONS	-	0	-	Volatile Organic Compounds (VOC)	LDAR BUT LOWER LEAK DEFINITION FOR VALVES IN G/LL SERVICE (500 PPM) AND PUMP SEALS IN LL (2000 PPM); LOW EMISSION VALVES WHERE APPROPRIATE.	0	-
IL-0119	PHILLIPS 66 PIPELINE LLC	IL	6110049	1/23/2015	Equipment Leaks / Fugitive Emissions	-	0	-	Volatile Organic Compounds (VOC)	LDAR	0	-
IN-0173	MIDWEST FERTILIZER CORPORATION	IN	129-33576-00059	6/4/2014	FUGITIVE EMISSIONS FROM EQUIPMENT LEAKS	-	0	-	Volatile Organic Compounds (VOC)	LEAK DETECTION AND REPAIR (LDAR) PROGRAM USING 40 CFR 60, SUBPART VVA PROCEDURES	0	-
IN-0179	OHIO VALLEY RESOURCES, LLC	IN	147-32322-00062	9/25/2013	FUGITIVE VOC EMISSIONS	-	0	-	Volatile Organic Compounds (VOC)	USE OF A LEAK DETECTION AND REPAIR (LDAR) PROGRAM USING 40 CFR 60, SUBPART VVA PROCEDURES.	0	-
IN-0180	MIDWEST FERTILIZER CORPORATION	IN	129-33576-00059	6/4/2014	FUGITIVE EMISSIONS FROM EQUIPMENT LEAKS	-	0	-	Volatile Organic Compounds (VOC)	LEAK DETECTION AND REPAIR (LDAR) PROGRAM USING 40 CFR 60, SUBPART VVA PROCEDURES	0	-
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Fugitive Emissions	-	0	-	Volatile Organic Compounds (VOC)	Mechanical seals or equivalent for pumps and compressors that serve VOC with vapor pressure of 1.5 psia and above	5.03	LB/H
LA-0277	COMONIMER-1 UNIT	LA	PSD-LA-814	9/1/2016	Fugitive Emissions	-	0	-	Volatile Organic Compounds (VOC)	Comply with requirements of 40 CFR 63 Subpart UU and LAC 33:III.2111	0	-
LA-0284	ALLIANCE REFINERY	LA	PSD-LA-799	9/2/2015	Unit Fugitives for Loading Docks (406-FF, FUG 11)	-	0	-	Volatile Organic Compounds (VOC)	LDAR: 40 CFR 63 Subpart H	0	-
LA-0288	LAKE CHARLES CHEMICAL COMPLEX	LA	PSD-LA-778	5/23/2014	Power Area Fugitives (FUG 12)	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR) Program: 40 CFR 63 Subpart FFFF	0.01	TPY
LA-0290	LAKE CHARLES CHEMICAL COMPLEX GTL LAB-2 UNIT	LA	PSD-LA-778	5/23/2014	LAB-2 Unit Fugitive Emissions (FUG 11)	-	0	-	Volatile Organic Compounds (VOC)	Leak detection and repair (LDAR) program: 40 CFR 63 Subpart H	16.77	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	GTL Unit Fugitive Emissions (FUG 15)	-	0	-	Volatile Organic Compounds (VOC)	Leak detection and repair (LDAR) program: 40 CFR 63 Subpart FFFF	89.13	TPY
LA-0294	DODSON DIVISION	LA	PSD-LA-627(M-3)	12/30/2013	Fugitive Ink Emissions (039, FUG 4)	-	0	-	Volatile Organic Compounds (VOC)	Good housekeeping practices and the use of low VOC materials when possible. Good housekeeping practices include keeping containers closed and minimizing spills and leaks to the maximum extent practical.	0.34	LB/H
LA-0295	WESTLAKE FACILITY	LA	PSD-LA-806	7/12/2016	Facility Fugitive Emissions (FUG 4)	-	0	-	Volatile Organic Compounds (VOC)	Leak detection and repair (LDAR): LAC 33:III.2122	0	-
LA-0296	LAKE CHARLES CHEMICAL COMPLEX LDPE UNIT	LA	PSD-LA-779	5/23/2014	LDPE Fugitives (FUG 13)	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR): 40 CFR 60 Subpart VVa	17.44	TPY
LA-0297	LAKE CHARLES CHEMICAL COMPLEX LLDPE UNIT	LA	PSD-LA-779	5/23/2014	LLDPE Fugitive Emissions (FUG 10)	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR): 40 CFR 63 Subpart FFFF	17.44	TPY
LA-0298	LAKE CHARLES CHEMICAL COMPLEX GUERBET ALCOHOLS UNIT	LA	PSD-LA-779	5/23/2014	Guerbet Fugitive Emissions (FUG 14)	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR): LAC 33:III.2122	25.54	TPY
LA-0299	LAKE CHARLES CHEMICAL COMPLEX ETHOXYLATION UNIT	LA	PSD-LA-779	5/23/2014	Fugitives (FUG 21)	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR): 40 CFR 63 Subpart FFFF	10.92	TPY
LA-0301	LAKE CHARLES CHEMICAL COMPLEX ETHYLENE 2 UNIT	LA	PSD-LA-779	5/23/2014	Steam Fugitive Emissions (FUG 17)	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR): LAC 33:III.2122	88.14	TPY
LA-0301	LAKE CHARLES CHEMICAL COMPLEX ETHYLENE 2 UNIT	LA	PSD-LA-779	5/23/2014	Fugitive Emissions (FUG 19)	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR): 40 CFR 63 Subpart UU	90.31	TPY
LA-0302	LAKE CHARLES CHEMICAL COMPLEX EO/MEG UNIT	LA	PSD-LA-779	5/23/2014	Fugitive Emissions (FUG 20)	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR): 40 CFR 63 Subpart H	26.51	TPY
LA-0303	LAKE CHARLES CHEMICAL COMPLEX ZIEGLER ALCOHOL UNIT	LA	PSD-LA-779	5/23/2014	Fugitive Emissions (FUG 22)	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR): 40 CFR 63 Subpart FFFF	308.48	TPY
LA-0307	MAGNOLIA LNG FACILITY	LA	PSD-LA-792	3/21/2016	fugitives	-	0	-	Volatile Organic Compounds (VOC)	Comply with LAC 33:III.2111	0	-
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	WWTF-13 - Wastewater Treatment Fugitives (FUG0001)	Wastewater	460	gallons/min	Volatile Organic Compounds (VOC)	Compliance with NESHAP Subpart F and NESHAP Subpart G. LDAR Monitoring.	0.29	LB/HR
*LA-0312	ST. JAMES METHANOL PLANT	LA	PSD-LA-780(M-1)	6/30/2017	PF-13 - Process Fugitives (FUG0002)	-	0	-	Volatile Organic Compounds (VOC)	Compliance with NESHAP Subpart H. LDAR Monitoring.	0	-
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Fugitive Emissions	-	0	-	Volatile Organic Compounds (VOC)	proper piping design, complying with LAC 33:III.2111, and conduct an LDAR meeting requirements of 40 CFR 63 Subpart UU	0	-
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Process Methanol Fugitives	-	0	-	Volatile Organic Compounds (VOC)	Compliance with 40 CFR 63 Subpart H LDAR program	0.08	LB/H
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Process Gasoline Fugitives	-	0	-	Volatile Organic Compounds (VOC)	Compliance with 40 CFR 63 Subpart H LDAR program	0.18	LB/H
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Wastewater System Fugitives	-	0	-	Volatile Organic Compounds (VOC)	Compliance with 40 CFR 63 Subpart H LDAR program	0.01	LB/H
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	fugitive emissions	-	0	-	Volatile Organic Compounds (VOC)	Complying with LAC 33:III.2111	0	-
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Fugitive Equipment Leaks	-	0	-	Volatile Organic Compounds (VOC)	Proper piping design and compliance with LAC 33:III.2111.	5	T/YR
MS-0092	EMBERCLEAR GTL MS	MS	0040-00055	5/8/2014	Process fugitives	-	0	-	Volatile Organic Compounds (VOC)	LDAR for all equipment in VOC service, equivalent to NSPS VVa	0	-

RBLC Entries for Volatile Organic Compounds Control from Equipment Leaks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Fugitive Emissions (P807)	-	0	-	Volatile Organic Compounds (VOC)	Enhanced connector monitoring requirements to the most stringent leak detection and repair (LDAR) regulation applicable to affected equipment/process units. The following identifies LDAR requirements for affected equipment/process units which have been determined to representative of BACT: i. 40 CFR Part 63 Subpart UU as applicable to the ethylene manufacturing process with enhanced connector monitoring; ii. 40 CFR Part 60 Subpart VVa as applicable to the polyethylene manufacturing process with enhanced connector monitoring; The LDAR programs indicated above which are representative of BACT shall implement the following enhanced connector monitoring requirements: i. connector monitoring subsequent to the initial monitoring required shall be performed on a quarterly basis; ii. if following the initial four (4) consecutive quarters, the percent leaking connectors in a process unit is less than 0.5 percent during the most recent quarterly monitoring event, then the frequency of connector monitoring can be reduced to semi-annual; iii. if following two (2) consecutive semi-annual periods, the percent leaking connectors in a process unit is less than 0.5 percent during the most recent semi-annual monitoring event, then the frequency of connector monitoring can be reduced to annual. iv. If more than or equal to 0.5 percent of the connectors in a process unit are determined to be leaking during any one of the semi-annual or annual monitoring events then the frequency of monitoring shall be returned to a quarterly basis.	99.38	T/YR
OK-0148	BUFFALO CREEK PROCESSING PLANT	OK	2012-1026-C PSD	9/12/2012	Fugitive Equipment Leaks (Natural Gas Plant)	N/A	0	-	Volatile Organic Compounds (VOC)	LDAR.	0	-
OK-0153	ROSE VALLEY PLANT	OK	2012-1393-C PSD	3/1/2013	FUGITIVE EQUIPMENT	NA	0	-	Volatile Organic Compounds (VOC)	LDAR IN COMPLIANCE WITH NSPS OOO.	0	-
OK-0176	BPV GATHERING AND MARKETING CUSHING STATION	OK	2016-1247-C PSD	7/19/2017	FUGITIVE EQUIPMENT LEAKS	NA	0	-	Volatile Organic Compounds (VOC)	Conduct and record AVO observations.	217.24	TONS/YEAR/FACILITY
SC-0170	BP AMOCO CHEMICAL COMPANY - COOPER RIVER PLANT	SC	0420-0029-CU	11/7/2014	#1 OXIDATION UNIT FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	HON LDAR	0	-
SC-0170	BP AMOCO CHEMICAL COMPANY - COOPER RIVER PLANT	SC	0420-0029-CU	11/7/2014	#2 OXIDATION UNIT FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	HON LDAR	0	-
SC-0182	FIBER INDUSTRIES LLC	SC	0820-0079.CA.R2	10/31/2017	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	Use of leakless types of components to replace individual chronically leaking components where possible and the use an LDAR program which includes the applicable provisions of 40 CFR 63, Subpart JJJ.	0	-
SC-0183	NUCOR STEEL - BERKELEY	SC	0420-0060-DX	5/4/2018	Pickle Line Equipment (pickle line no. 3 fugitives)	-	0	-	Volatile Organic Compounds (VOC)	Proper Operation and Maintenance	0	-
TX-0613	EAST HOUSTON TERMINAL	TX	94433 AND N134	4/23/2012	Storage Tank Terminal Piping/Components Fugitives	-	0	-	Volatile Organic Compounds (VOC)	28LAER Leak Detection and Repair (LDAR) program. All components monitored quarterly with 500 ppmv leak definition. Weekly visual check on components in heavy liquid service	0.16	LB/H
TX-0656	GAS TO GASOLINE PLANT	TX	PSDTX1340 AND 107764	5/16/2014	Fugitive Components	-	0	-	Volatile Organic Compounds (VOC)	LDAR 28 VHP	500	PPM
*TX-0657	BEAUMONT GAS TO GASOLINE PLANT	TX	PSDTX1340 AND 107764	5/16/2014	Fugitive emissions in Gas to Gasoline Plant	-	0	-	Volatile Organic Compounds (VOC)	28 VHP Fugitive Monitoring Program	25.58	TPY
TX-0663	JACKSON COUNTY GAS PLANT	TX	PSDTX1264	5/25/2012	Total Fugitives	-	0	-	Volatile Organic Compounds (VOC)	28LAER	0	-
TX-0682	GALENA PARK TERMINAL	TX	101199 & N158	6/12/2013	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	28 LAER monitoring program with a leak definition of 500 ppmv will be used for control of fugitives. A weekly visual inspection will also be performed on components in heavy liquid service	500	PPMV
TX-0684	ENTERPRISE MONT BELVIEU COMPLEX	TX	100091,PSDTX1286 AND N154	11/14/2012	Fugitive Components	-	0	-	Volatile Organic Compounds (VOC)	28LAER leak detection and repair program	1.29	LB/H
TX-0711	CELANESE CLEAR LAKE PLANT	TX	103626, N164, PSDTX1296	9/16/2013	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	28 LAER leak detection and repair program	0	-
TX-0721	PROPANE DEHYDROGENATION UNIT	TX	100787, PSDTX1314	1/7/2013	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	VOC fugitives will be controlled by 28 MID LDAR programs.	0	-
TX-0722	ORGANIC CHEMICAL MANUFACTURING	TX	N178	3/14/2014	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	Chevron Phillip's proposes to utilize the 28 LAER leak detection and repair program with that addition of quarterly connector monitoring for fugitive components associated with the project.	0	-
TX-0723	NATURAL GAS LIQUIDS PROCESSING PLANT	TX	N182	11/21/2014	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	Piping, valves, pumps, compressors, and other fittings will be subject to a leak detection and repair program with some directed to flare control as minor vents. 28 LAER will be implemented	0	-
TX-0731	CORPUS CHRISTI TERMINAL CONDENSATE SPLITTER	TX	118270 AND PSDTX1398	4/10/2015	Petroleum Refining Equipment Leaks/Fugitive Emissions	-	100000	Bbl/day	Volatile Organic Compounds (VOC)	Quarterly instrumental monitoring using a method 21 gas analyzer for all valves, pump seals, compressor seals, and agitator seals with a leak definition of 500 parts per million volume (ppmv) for valves and 2,000 ppmv for pump, compressor and agitator seals. Leaking components must be repaired within 15 days of detection of the leak.	36.6	TPY

RBLC Entries for Volatile Organic Compounds Control from Equipment Leaks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
TX-0752	INGLESIDE TERMINAL	TX	122362, PSDTX1430	6/22/2015	Fugitives	-	110	MBBL/YR	Volatile Organic Compounds (VOC)	28 VHP: Quarterly instrumental monitoring using a method 21 gas analyzer for all valves, pump seals, compressor seals, and agitator seals with a leak definition of 500 ppmv for valves and 2,000 ppmv for pump, compressor and agitator seals. Leaking components must be repaired within 15 days of detection of the leak.	5.4	T/YR
TX-0756	CCI CORPUS CHRISTI CONDENSATE SPLITTER FACILITY	TX	116072 AND PSDTX1388	6/19/2015	Fugitive Components	-	0	-	Volatile Organic Compounds (VOC)	Fugitive Leak Detection and Repair (LDAR) program that requires quarterly monitoring of valves with a leak definition of 500 ppmv. Quarterly monitoring of pump and compressor seals with a leak definition of 2,000 ppmv.	500	PPMV
TX-0759	PORT ARTHUR REFINERY	TX	6056, PSDTX1062M2, & GHG121	7/31/2015	Hydrocracking and Hydro-treating Fugitive Components	-	105	K BBL/DAY	Volatile Organic Compounds (VOC)	Enhanced Fugitive Leak Detection and Repair (LDAR) program that requires quarterly monitoring of valves, pumps, and compressor seals with a leak definition of 500 ppmv. Enhancements to the LDAR program include: 1) Monitoring to be done with data loggers capable of assigning time stamps to individual monitoring events; 2) Repair of leaking components found during weekly physical inspections within 15 days; 3) First attempt of repair of any valve found with a VOC reading greater than 100 ppmv; 4) Conduct of annual training for all of all LDAR technicians in the application of Method 21 consistent with the requirements of the permit; 5) Performance of a third party audit by no later than December 31, 2015 and then at least once every two years thereafter to verify whether EPA Method 21 is being properly applied; 6) and Initiation of an optical gas imaging (OGI) enhanced monitoring program for equipment leaks at those process units subject to EPA Method 21. In addition to the enhanced program, Motiva has agreed to perform quarterly instrument monitoring on fugitive components in heavy liquid service as well as quarterly instrument monitoring on all connectors with a leak definition of 500 ppmv.	500	PPM
TX-0760	CORPUS CHRISTI TERMINAL	TX	32769/ PSDTX1258M1/ O-1238	8/6/2015	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	Fugitive Leak Detection and Repair (LDAR) per the 28 MID Monitoring program that requires quarterly monitoring of all components with a leak definition of 500 ppmv and directed maintenance.	500	PPMV
TX-0765	SUNOCO MARINE VESSEL LOADING OPERATIONS	TX	56508, PSDTX1444, AND O-1573	9/18/2015	Petroleum Refining Equipment Leaks/Fugitive Emissions	-	100	MMbbl/yr	Volatile Organic Compounds (VOC)	Quarterly instrumental monitoring using a method 21 gas analyzer for all valves, pump seals, compressor seals, and agitator seals with a leak definition of 500 ppmv for valves and 2,000 ppmv for pump, compressor and agitator seals. Leaking components must be repaired within 15 days of detection of the leak.	10.13	TPY
TX-0774	BISHOP FACILITY	TX	123216, PSDTX1438 AND GHGPSDTX	11/12/2015	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	28VHP fugitive monitoring program	4.61	TPY
TX-0783	LBC HOUSTON BAYPORT TERMINAL	TX	123325, N206	2/5/2016	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	An enhanced leak detection and repair program (28LAER) that requires quarterly instrumental monitoring of all fugitive components (pumps, compressors, valves, connectors, seals, etc.) with directed maintenance.	500	PPMV
TX-0790	PORT ARTHUR LNG EXPORT TERMINAL	TX	131769, PSDTX1456, GHGPSDTX134	2/17/2016	LNG Export Facility - Natural Gas Fugitive Emissions	-	0	-	Volatile Organic Compounds (VOC)	Work practice - leak detection and repair program (TCEQ's 28 VHP LDAR program)	21.65	T/YR
TX-0797	CORPUS CHRISTI TERMINAL	TX	32769/ PSDTX1258M2/ O-1238	5/4/2016	Petroleum Refining Equipment Leaks/Fugitive Emissions	-	0	-	Volatile Organic Compounds (VOC)	Fugitive Leak Detection and Repair (LDAR) per the 28 MID Monitoring program that requires quarterly monitoring of all components with a leak definition of 500 ppmv and directed maintenance.	500	PPM
TX-0799	BEAUMONT TERMINAL	TX	18295, PSDTX1466, GHGPSDTX139	6/8/2016	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	Uncontrolled VOC fugitive emissions are estimated to be greater than 25 tpy. Component fugitive emissions are calculated using component counts and the SOCMI without ethylene emission factors. Phillips 66 employs the 28VHP inspection and 28CNTQ monitoring program	33.18	T/YR
TX-0800	CORPUS CRUDE OIL TERMINAL	TX	103976, PSDTX1406	6/22/2016	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	Uncontrolled VOC fugitive emissions are estimated to be less than 10 TPY. Fugitive components are monitored and minimized via an audio, olfactory, and visual (AVO) inspection once every four hours.	0.41	T/YR
TX-0803	PL PROPYLENE HOUSTON OLEFINS PLANT	TX	18999, PSDTX755M1, N216	7/12/2016	Equipment Leak Fugitives	-	0	-	Volatile Organic Compounds (VOC)	LDAR (TCEQ 28LAER)	11.58	LB/H
TX-0804	ADN UNIT	TX	7186, PSDTX1079M1, GHGPSDTX145	7/15/2016	Equipment Leak Fugitives	-	0	-	Volatile Organic Compounds (VOC)	LDAR program (TCEQ 28VHP)	5.41	LB/H
TX-0808	HOUSTON FUEL OIL TERMINAL	TX	5783, N57M1, O1093	9/2/2016	Fugitives at Marine Loading	-	0	-	Volatile Organic Compounds (VOC)	Monitoring under 28LAER (Lowest Available Emission Rate) Leak Detection and Repair program.	0.04	T/YR
TX-0813	ODESSA PETROCHEMICAL PLANT	TX	16963, PSDTX1478, GHGPSDTX148	11/22/2016	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	Quarterly instrumental monitoring of accessible pumps, compressors and valves in vapor or light liquid service, with leak definitions of 500 ppmv (valves) and 2,000 ppmv (pump and compressor seals). Upon detection of a leak, a first attempt to repair must be made within 5 days, and repairs must be completed within 15 days.	88.52	T/YR
TX-0815	PORT ARTHUR ETHANE SIDE CRACKER	TX	122353, PSDTX1426, GHGPSDTX114	1/17/2017	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28VHP LDAR Program	17.2	T/YR
TX-0818	FUEL OIL TERMINAL	TX	5783, N57M2	4/26/2017	FUGITIVES MARINE LOADING	-	0	-	Volatile Organic Compounds (VOC)	Monitoring under 28LAER (Lowest Available Emission Rate) Leak Detection and Repair program.	0.16	T/YR

RBLC Entries for Volatile Organic Compounds Control from Equipment Leaks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
TX-0823	LYONDELL CHEMICAL BAYPORT CHOATE PLANT	TX	137789 AND N244	6/7/2017	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28 LAER	4.36	T/YR
TX-0840	CORPUS CHRISTI TERMINAL	TX	32769 AND PSDTX1258M3	10/31/2018	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	Fugitive Leak Detection and Repair (LDAR) per the 28 MID Monitoring program that requires quarterly monitoring of all components with a leak definition of 500 ppmv and directed maintenance.	0	-
TX-0843	VICTORIA PLANT	TX	PSDTX1079M2, GHGPSDTX145M1	6/30/2018	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28VHP	203	T/YR
TX-0847	VALERO PORT ARTHUR REFINERY	TX	6825A, N65, PSDTX49M1, GHGPSDT	9/16/2018	Equipment Leaks/Fugitive Emissions	-	0	-	Volatile Organic Compounds (VOC)	28 VHP	0	-
TX-0849	MONT BELVIEU	TX	101616, PSDTX696M2, N214M1,	10/16/2018	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28 VHP LAER	0	-
TX-0850	CORPUS CHRISTI TERMINAL	TX	32769, PSDTX1258M3	7/15/2018	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28 MID	0	-
TX-0851	RIO BRAVO PIPELINE FACILITY	TX	140792, PSDTX149B, GHGPSDTX158	12/17/2018	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28VHP	0	-
TX-0852	CORPUS CHRISTI WATERFRONT TERMINAL	TX	145717 AND PSDTX1516	1/2/2019	Fugitive Components	-	0	-	Volatile Organic Compounds (VOC)	28LAER	0	-
*WI-0261	ENBRIDGE ENERGY - SUPERIOR TERMINAL	WI	13-DCF-129	6/12/2014	Piping components / pumping fugitive	-	0	-	Volatile Organic Compounds (VOC)	Routine Leak Detection and Repair (LDAR) Quarterly or semiannual if leak rate is less than 0.5%. 500 ppm detection threshold. LDAR combining routine M21 as well as sound, sight and smell observations. May screen using Smart LDAR (IR cam) w/ M21 confirmation. Use of certified low leaking valves or valves fitted with certified low leaking valve packing technology except where demonstrated as not commercially available for a particular application. Pigging equipment shall be constructed to drain to a sump tank and depressurize prior to opening. Normally limited to routine maint. / inspection operation except for Line 61 where needed for batch segregation. See 13-DCF-129, 12-DCF-205.	0	-
IA-0106	CF INDUSTRIES NITROGEN, LLC - PORT NEAL NITROGEN COMPLEX	IA	PN 13-037	7/12/2013	VOC Emissions from Equipment Leaks	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR) Monitoring System	1.1	TONS/YR
IA-0111	DES MOINES SOYBEAN PROCESSING PLANT	IA	PROJECT 15-079	9/22/2015	Equipment Leaks	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR) Monitoring System	788	TONS/YR
*OH-0368	PALLAS NITROGEN LLC	OH	P0118959	4/19/2017	Urea Process Equipment Leaks (F004)	-	0	-	Volatile Organic Compounds (VOC)	Leak detection and repair (LDAR) and comply with work practice standards in 40 CFR 60.482-1a 60.482-11a as applicable for all equipment in VOC service.	4.1	LB/H
OK-0156	NORTHSTAR AGRI IND ENID	OK	2013-0109-C PSD	7/31/2013	Equipment Leaks	-	0	-	Volatile Organic Compounds (VOC)	Leak Detection and Repair (LDAR)	0	-
TX-0811	LINEAR ALPHA OLEFINS PLANT	TX	136130 AND N250	11/3/2016	SOCMI Equipment Leaks	-	0	-	Volatile Organic Compounds (VOC)	Quarterly instrumental monitoring of all accessible piping components (pumps, compressors, valves, flanges) in vapor and light liquid service with a leak definition of 500 ppmv VOC. Weekly audio-visual-olfactory monitoring for all components in heavy liquid service. Upon detection of a leak, a first attempt must be made to repair within 5 days, and repairs must be completed within 15 days.	6.87	T/YR
TX-0812	CRUDE OIL PROCESSING FACILITY	TX	9342A, 9343A, PSDTX963M1, GHGP	10/31/2016	Equipment Leaks	-	0	-	Volatile Organic Compounds (VOC)	Quarterly instrumental monitoring of accessible pumps, compressors and valves in vapor or light liquid service, with leak definitions of 500 ppmv (valves) and 2,000 ppmv (pump and compressor seals). Upon detection of a leak, a first attempt to repair must be made within 5 days, and repairs must be completed within 15 days.	8.72	T/YR
*IN-0317	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Block 2000 fugitive emissions	-	0	-	Volatile Organic Compounds (VOC)	leak detection and repair (LDAR) program	151.18	TONS
*IN-0317	RIVERVIEW ENERGY CORPORATION	IN	T147-39554-00065	6/11/2019	Block 4000 fugitive emissions	-	0	-	Volatile Organic Compounds (VOC)	Leak detection and repair (LDAR) program	25.04	TONS
*LA-0356	GARYVILLE REFINERY	LA	PSD-LA-822(M2)	9/27/2019	Fugitive Emissions (Unit 305, Unit 333, Refinery, GRL)	-	0	-	Volatile Organic Compounds (VOC)	Comply with 40 CFR 60 Subpart GGGa	0	-
*LA-0362	LAKE CHARLES REFINERY, AREA D	LA	PSD-LA-833	7/18/2019	Area D Process D Fugitives	-	0	-	Volatile Organic Compounds (VOC)	Compliance with the most stringent applicable Leak Detection and Repair (LDAR) program, which is Louisiana MACT Determination for Refineries with Consent Decree Enhancements.	24.44	LB/H
*OK-0180	CUSHING TERMINAL	OK	2015-1352-C(M-3)PSD	8/27/2019	FUGITIVE EQUIPMENT LEAKS	NA	6445918	BBL/TANK/YR	Volatile Organic Compounds (VOC)	Conduct and record AVO observations. Prepare, implement, and maintain SPCC plan. Records of inspections, identified leaks, and corrective actions.	0	-
TX-0858	GULF COAST GROWTH VENTURES PROJECT	TX	146425, PSDTX1518, GHGPSDTX170	6/12/2019	Fugitive Components	-	0	-	Volatile Organic Compounds (VOC)	TCEQ 28VHP and 28CNTQ leak detection and repair (LDAR) programs for piping components in VOC service	0	-
TX-0859	GULF COAST GROWTH VENTURES PROJECT RAILYARD	TX	146959 AND PSDTX1520	6/12/2019	Fugitive Components & Piping	-	0	-	Volatile Organic Compounds (VOC)	monitored quarterly using an approved portable hydrocarbon analyzer. Leaks are defined at 500 ppmv VOC for valves and flanges, and 2,000 ppmv VOC for pump seals. Components in heavy liquid service, which are exempt from instrumental monitoring, must be inspected weekly via audio, visual and olfactory (AVO)	0	-
TX-0861	BUCKEYE TEXAS PROCESSING CORPUS CHRISTI FACILITY	TX	109923, PSDTX1502, AND GHGPSDT	8/29/2019	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28VHP LDAR	0	-

RBLC Entries for Volatile Organic Compounds Control from Equipment Leaks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
TX-0862	BUCKEYE TEXAS HUB	TX	106594, PSDTX1324M2, AND GHGPS	9/27/2019	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	28 VHP & 28CNTA LDAR	0	-
TX-0863	POLYETHYLENE 7 FACILITY	TX	153106 AND N268	9/3/2019	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28 MID	0	-
TX-0864	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	TX	N266, PSDTX1542, GHGPSDTX183	9/9/2019	Fugitive Components	-	0	-	Volatile Organic Compounds (VOC)	28LAER & 28PI	500	PPMV
TX-0865	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	TX	N264, PSDTX1540, GHGPSDTX182	9/9/2019	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28LAER, 28PI LDAR	0	-
TX-0865	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	TX	N264, PSDTX1540, GHGPSDTX182	9/9/2019	Equipment MSS	-	0	-	Volatile Organic Compounds (VOC)	The uncontrolled equipment clearing is estimated on the total process vessel volume in the unit and a BACT concentration of 10,000 ppmv to opening	0	-
TX-0871	PORT ARTHUR REFINERY	TX	PSDTX1062M4, GHGPSDTX121,	1/31/2020	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	28VHP leak detection and repair (LDAR)	0	-
TX-0872	CONDENSATE SPLITTER FACILITY	TX	118270 PSDTX1398M1 GHGPSDTX62	10/31/2019	Fugitives (Routine)	-	0	-	Volatile Organic Compounds (VOC)	28VHP. Leak-less connectors.	15.63	LB/H
TX-0873	PORT ARTHUR REFINERY	TX	PSDTX1062M3 AND GHGPSDTX121M1	2/4/2020	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28 MID, 28 AVO and OGI fugitive programs. Authorized for infrared camera (28MID+).	0	-
TX-0874	PORT ARTHUR REFINERY	TX	PSDTX1062M3, AND GHGPSDTX156	2/4/2020	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28MID LDAR and 28CNTQ.	0	-
TX-0876	PORT ARTHUR ETHANE CRACKER UNIT	TX	PSDTX1546 AND GHGPSDTX186	2/6/2020	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	TCEQ 28VHP and 28CNTQ leak detection and repair (LDAR) programs	500	PPMV
TX-0877	SWEENY REFINERY	TX	18142 AND N278	1/8/2020	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28 MID, 28CNTQ, and 28 PI programs. 28 MID: 97% control efficiencies for valves in gas/vapor and light liquid, 93% control efficiency for pumps light liquids and 30% for heavy liquid, 95% for compressors, 97% for relief valves. 28CNTQ: 97% control efficiencies for flanges/connectors in gas/vapor and light liquid and 30% for heavy liquid. 28PI: 30% control efficiencies for valves all phases, pumps all phases, flanges/connectors all phases, compressors, and relieve valves.	0	-
TX-0879	MOTIVA PORT ARTHUR TERMINAL	TX	7238 AND PSDTX1548	2/19/2020	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28PET leak detection and repair program. Monthly Audio/Visual/Olfactory (AVO) inspection requirements	0	-
TX-0879	MOTIVA PORT ARTHUR TERMINAL	TX	7238 AND PSDTX1548	2/19/2020	PROCESS FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28VHP leak detection and repair program. 97% credit for valves, 85% for pumps and compressors.	0	-
TX-0884	PROPANE DEHYDROGENATION (PDH) UNIT	TX	N272, PSDTX1558, GHGPSDTX193	1/24/2020	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28 LAER	0	-
TX-0886	MONT BELVIEU NGL FRACTIONATION UNIT	TX	106921, N270	3/31/2020	EQUIPMENT LEAK FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28 LAER leak detection and repair (LDAR) program	0	-
TX-0886	MONT BELVIEU NGL FRACTIONATION UNIT	TX	106921, N270	3/31/2020	EQUIPMENT MSS	-	0	-	Volatile Organic Compounds (VOC)	Depressure to flare, minimize emissions by pumping liquids to recovery, degas/purge to flare until residual VOC concentration is less 10,000 ppmv	0	-
TX-0887	MIDLAND PLAINS MARKETING TERMINAL	TX	157087 AND PSDTX1568	4/7/2020	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	The site-wide fugitive emissions are less than 10 tpy uncontrolled VOC emissions. LADR program and emission reduction credit is not applied.	0	-
TX-0888	ORANGE POLYETHYLENE PLANT	TX	155952 PSDTX1556 GHGPSDTX192	4/23/2020	FUGITIVE COMPONENTS	-	0	-	Volatile Organic Compounds (VOC)	28 VHP, 28CNTA, 28PI leak detection and repair (LDAR) programs	0	-
TX-0890	ENTERPRISE PRODUCTS OPERATING MOUNT BELVIEU COMPLEX	TX	107523, PSDTX1336, AND N174M1	7/15/2020	Fugitive components	-	0	-	Volatile Organic Compounds (VOC)	28 LAER LDAR	0	-
TX-0892	NEDERLAND TERMINAL	TX	PSDTX1444M1, GHGPSD191	7/13/2020	fugitives	-	0	-	Volatile Organic Compounds (VOC)	28-VHP LDAR fugitive	0	-
TX-0894	CHEVRON PHILLIPS CHEMICAL SWEENY COMPLEX	TX	103832 AND N166M3	10/30/2020	Unit 81 Fugitives (EPN FUG-02)	-	0	-	Volatile Organic Compounds (VOC)	Piping components at the Sweeny site are currently monitored under the stringent 28LAER LDAR program. The proposed piping components in this amendment will be monitored using the 28LAER program. Valves in heavy liquid service will use the language in the 28LAER LDAR program that requires AVO inspection.	0	-
*TX-0903	SWEENY REFINERY	TX	5920A, N292, PSDTX103M4	9/9/2020	Equipment Leaks/Fugitive Emission	-	0	-	Volatile Organic Compounds (VOC)	Fugitive Leak Detection and Repair (LDAR) per the 28MID, 28PI, 28CNTQ, and 28CNTA monitoring programs.	0	-
*TX-0904	MOTIVA POLYETHYLENE MANUFACTURING COMPLEX	TX	156571, PSDTX1564, GHGPSDTX195	9/9/2020	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	TCEQ 28VHP and 28CNTQ leak detection and repair (LDAR) programs	0	-
*TX-0906	PORT ARTHUR REFINERY	TX	6825A, PSDTX49M2, GHGPSDTX167M	10/30/2020	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	TCEQ 28VHP (LDAR) program	0	-
*TX-0909	POLYETHYLENE UNIT 1792	TX	N294	12/8/2020	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	28VHP	0	-
*TX-0910	POLYETHYLENE UNIT 1796	TX	19027 AND N296	12/11/2020	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28 VHP	0	-
*TX-0912	MONT BELVIEU FRACTIONATOR	TX	101616 AND N214M2	2/5/2021	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	Implement a 28LAER Leak Detection and Repair program including monitoring for leaks using Method 21.	0	-
*TX-0916	CEDAR BAYOU	TX	1504A AND N148M2	2/1/2021	FUGITIVE COMPONENTS	-	0	-	Volatile Organic Compounds (VOC)	28 VHP	0	-
*IA-0117	SHELL ROCK SOY PROCESSING	IA	20-A-288-P	3/17/2021	Fugitive VOC Sources	-	0	-	Volatile Organic Compounds (VOC)	-	0.14	GAL/TON
*PA-0324	MARCUS HOOK	PA	23-0119J	2/12/2021	Fugitive leaks	-	0	-	Volatile Organic Compounds (VOC)	-	500	PPM
*TX-0899	LBC HOUSTON BAYPORT TERMINAL	TX	123325 AND N206M2	3/5/2021	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	Fugitive components will be monitored under the 28LAER program. This control meets LAER.	0	-
*TX-0908	NEWMAN POWER STATION	TX	N284, PSDTX1090M1, GHGPSDTX199	8/27/2021	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	weekly AVO	0	-
*TX-0918	CEDAR BAYOU PLANT	TX	123325 AND N206M2	3/5/2021	FUGITIVE COMPONENTS	-	0	-	Volatile Organic Compounds (VOC)	28LAER	0	-

RBLC Entries for Volatile Organic Compounds Control from Equipment Leaks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
*TX-0929	FORMOSA POINT COMFORT PLANT	TX	127838 AND PSDTX1588	10/15/2021	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	modified 28VHP LDAR program in VOC service. A more stringent 500ppmv leak definition of 28MID is used. Annual 28CNTA monitoring is voluntarily used.	0	-
LA-0385	GARYVILLE REFINERY	LA	PSD-LA-822(M3)	2/11/2021	Refinery Fugitives	-	0	-	Volatile Organic Compounds (VOC)	Comply with 40 CFR 60 Subpart GGGa (for components servicing streams with 10% or more VOC)	0	-
*TX-0921	HOUSTON PLANT - 22052	TX	22052, PSDTX1578, N286, GHG201	6/13/2022	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28LAER	0	-
*TX-0922	HOUSTON PLANT - 46307	TX	46307, PSDTX1580, N288, GHG202	6/13/2022	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28 LAER	0	-
*TX-0924	HOUSTON PLANT - 19806	TX	19806 AND PSDTX1586	6/13/2022	FUGITIVES	-	0	-	Volatile Organic Compounds (VOC)	28 LAER	0	-
TX-0931	ROEHM AMERICA BAY CITY SITE	TX	103, PSDTX1596, GPSDTX	12/16/2021	Fugitives	-	0	-	Volatile Organic Compounds (VOC)	TCEQ 28VHP/28CNTQ (LDAR) Program	0	-
*TX-0936	BILL GREEHEY REFINERY EAST PLANT	TX	2937, PSDTX1023M3	3/29/2022	REFINERY FUGITIVES	-	0	MBF/YR	Volatile Organic Compounds (VOC)	28VHP, 28AVO	0	-

RBLC Entries for Greenhouse Gases Control from Equipment Leaks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
CO-0067	LANCASTER PLANT	CO	12WE1492	6/4/2013	Fugitive emissions from leaking components	-	0	-	Carbon Dioxide Equivalent (CO2e)	LDAR	0	-
CO-0068	LUCERNE GAS PROCESSING PLANT	CO	12WE2024	1/13/2014	Fugitive emissions from leaking components	-	0	-	Carbon Dioxide Equivalent (CO2e)	LDAR	200	TON CO2E
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Fugitive Emissions	-	0	-	Carbon Dioxide Equivalent (CO2e)	Conduct a leak detection and repair (LDAR) program	89629	TONS/YR
LA-0263	ALLIANCE REFINERY	LA	PSD-LA-760	7/25/2012	HYDROGEN PLANT FUGITIVES (2291-FF, FUG 0026)	-	0	-	Carbon Dioxide Equivalent (CO2e)	IMPLEMENTATION OF THE LOUISIANA REFINERY MACT LEAK DETECTION AND REPAIR PROGRAM; MONITORING FOR TOTAL HYDROCARBON CONTENT INSTEAD OF VOC	0	-
LA-0266	EUNICE GAS EXTRACTION PLANT	LA	PSD-LA-569(M-1)	5/1/2013	Process Fugitives (16) (FUG 0001)	-	0	-	Carbon Dioxide Equivalent (CO2e)	LDAR programs: NSPS KKK and LAC 33:III.2121	0	-
LA-0271	PLAQUEMINE NGL FRACTIONATION PLANT	LA	PSD-LA-771	5/24/2013	Fugitive Emissions (FUG-01)	-	0	-	Carbon Dioxide Equivalent (CO2e)	Compliance with LDAR programs under 40 CFR 60 Subpart OOOO, LAC 33:III.2111, and LAC 33:III.2122	0	-
LA-0287	ALEXANDRIA COMPRESSOR STATION	LA	PSD-LA-787	7/21/2014	Fugitive Emissions and Blowdowns (FUG, FUG 01)	-	0	-	Carbon Dioxide Equivalent (CO2e)	Limit the number of compressor blowdowns to no more than 110 per year per compressor; tandem dry seals for centrifugal compressor shafts; new pneumatic equipment must utilize compressed air or be of a no-bleed or low-bleed design; use of low leak technologies for valves and flanges/connectors; minimization of the number of flanges/connectors to the extent practicable; and use of high quality components and materials of construction.	9818	TONS
LA-0288	LAKE CHARLES CHEMICAL COMPLEX	LA	PSD-LA-778	5/23/2014	Power Area Fugitives (FUG 12)	-	0	-	Carbon Dioxide Equivalent (CO2e)	Leak Detection and Repair (LDAR) Program: 40 CFR 63 Subpart FFFF	20	TPY
LA-0291	LAKE CHARLES CHEMICAL COMPLEX GTL UNIT	LA	PSD-LA-778	5/23/2014	GTL Unit Fugitive Emissions (FUG 15)	-	0	-	Carbon Dioxide Equivalent (CO2e)	Leak detection and repair (LDAR) program: 40 CFR 63 Subpart FFFF	1214	TPY
LA-0302	LAKE CHARLES CHEMICAL COMPLEX EO/MEG UNIT	LA	PSD-LA-779	5/23/2014	Fugitive Emissions (FUG 20)	-	0	-	Carbon Dioxide Equivalent (CO2e)	Leak Detection and Repair (LDAR): 40 CFR 63 Subpart H	204	TPY
LA-0307	MAGNOLIA LNG FACILITY	LA	PSD-LA-792	3/21/2016	fugitives	-	0	-	Carbon Dioxide Equivalent (CO2e)	Good piping design/maintenance/work practices	0	-
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Process Methanol Fugitives	-	0	-	Carbon Dioxide Equivalent (CO2e)	Energy Efficiency Measures	0	-
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Process Gasoline Fugitives	-	0	-	Carbon Dioxide Equivalent (CO2e)	Energy Efficiency Measures	0	-
*LA-0315	G2G PLANT	LA	PSD-LA-781	5/23/2014	Wastewater System Fugitives	-	0	-	Carbon Dioxide Equivalent (CO2e)	Energy Efficiency Measures	0	-
LA-0316	CAMERON LNG FACILITY	LA	PSD-LA-766(M3)	2/17/2017	fugitive emissions	-	0	-	Carbon Dioxide Equivalent (CO2e)	Implement a leak detection and repair (LDAR) program to minimize the leak	0	-
*LA-0331	CALCASIEU PASS LNG PROJECT	LA	PDS-LA-805	9/21/2018	Fugitive Equipment Leaks	-	0	-	Carbon Dioxide Equivalent (CO2e)	Proper piping design.	3141	T/YR
MD-0041	CPV ST. CHARLES	MD	PSC CASE NO. 9280	4/23/2014	FUGITIVE GHG EMISSIONS	-	0	-	Carbon Dioxide Equivalent (CO2e)	IMPLEMENTATION OF AN AUDIO, VISUAL AND OLFACTORY (AVO) PROGRAM ON A WEEKLY BASIS	72.7	TONS
*OH-0378	PTTGCA PETROCHEMICAL COMPLEX	OH	P0124972	12/21/2018	Fugitive Emissions (P807)	-	0	-	Carbon Dioxide Equivalent (CO2e)	i. An LDAR program for leaks of methane from equipment and piping components in tail gas (fuel gas) and natural gas service. The LDAR program will involve sensory monitoring methods for leaks; ii. Methane contained in leaks associated with fugitive VOCs will be minimized by the implementation of BACT for fugitive leaks of VOC.	35	T/YR
OK-0148	BUFFALO CREEK PROCESSING PLANT	OK	2012-1026-C PSD	9/12/2012	Fugitive Equipment Leaks (Natural Gas Plant)	N/A	0	-	Carbon Dioxide Equivalent (CO2e)	LDAR.	0	-
OK-0153	ROSE VALLEY PLANT	OK	2012-1393-C PSD	3/1/2013	FUGITIVE EQUIPMENT	NA	0	-	Carbon Dioxide Equivalent (CO2e)	LDAR IN COMPLIANCE WITH NSPS OOO.	0	-
SC-0183	NUCOR STEEL - BERKELEY	SC	0420-0060-DX	5/4/2018	Pickle Line Equipment (pickle line no. 3 fugitives)	-	0	-	Carbon Dioxide Equivalent (CO2e)	Energy Efficient Design	0	-

RBLC Entries for Greenhouse Gases Control from Equipment Leaks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
TX-0759	PORT ARTHUR REFINERY	TX	6056, PSDTX1062M2, & GHG121	7/31/2015	Hydrocracking and Hydro-treating Fugitive Components	-	105	K BBL/DAY	Carbon Dioxide Equivalent (CO2e)	Enhanced Fugitive Leak Detection and Repair (LDAR) program that requires quarterly monitoring of valves, pumps, and compressor seals with a leak definition of 500 ppmv. Enhancements to the LDAR program include: 1) Monitoring to be done with data loggers capable of assigning time stamps to individual monitoring events; 2) Repair of leaking components found during weekly physical inspections within 15 days; 3) First attempt of repair of any valve found with a VOC reading greater than 100 ppmv; 4) Conduct of annual training for all of all LDAR technicians in the application of Method 21 consistent with the requirements of the permit; 5) Performance of a third party audit by no later than December 31, 2015 and then at least once every two years thereafter to verify whether EPA Method 21 is being properly applied; 6) and Initiation of an optical gas imaging (OGI) enhanced monitoring program for equipment leaks at those process units subject to EPA Method 21. In addition to the enhanced program, Motiva has agreed to perform quarterly instrument monitoring on fugitive components in heavy liquid service as well as quarterly instrument monitoring on all connectors with a leak definition of 500 ppmv.	500	PPMV
TX-0766	GOLDEN PASS LNG EXPORT TERMINAL	TX	116055, PSDTX1386, GHGPSDTX100	9/11/2015	Fugitive Emissions	-	0	-	Carbon Dioxide Equivalent (CO2e)	Work practice leak detection and repair program	2569	TPY
TX-0774	BISHOP FACILITY	TX	123216, PSDTX1438 AND GHGPSDTX	11/12/2015	Fugitives	-	0	-	Carbon Dioxide Equivalent (CO2e)	28VHP fugitive monitoring program on lines containing >10% methane	344	TPY
TX-0790	PORT ARTHUR LNG EXPORT TERMINAL	TX	131769, PSDTX1456, GHGPSDTX134	2/17/2016	LNG Export Facility - Natural Gas Fugitive Emissions	-	0	-	Carbon Dioxide Equivalent (CO2e)	Work practice - leak detection and repair program (TCEQ's 28 VHP LDAR program)	1113	T/YR
TX-0801	PL PROPYLENE HOUSTON OLEFINS PLANT	TX	GHGPSDTX137	6/24/2016	Fugitives	-	0	-	Carbon Dioxide Equivalent (CO2e)	LDAR 28LAER	0	-
TX-0824	JACKSON COUNTY GENERATING FACILITY	TX	GHGPSDTX118	6/30/2017	Natural Gas Fugitives	-	0	-	Carbon Dioxide Equivalent (CO2e)	Weekly checks for leaks using audio, visual, and olfactory (AVO) sensing for natural gas leaks	693.3	T/YR
TX-0832	EXXONMOBIL BEAUMONT REFINERY	TX	PSDTX768M1, PSDTX799, PSDTX802	1/9/2018	FUGITIVES	-	0	-	Carbon Dioxide Equivalent (CO2e)	AVO	758	TON/YR
TX-0845	ARKEMA BEAUMONT PLANT	TX	865A, PSDTX1016M2, GHGPSDTX168	8/24/2018	FUGITIVES	-	0	-	Carbon Dioxide Equivalent (CO2e)	AVO	0	-
TX-0847	VALERO PORT ARTHUR REFINERY	TX	6825A, N65, PSDTX49M1, GHGPSDT	9/16/2018	Equipment Leaks/Fugitive Emissions	-	0	-	Carbon Dioxide Equivalent (CO2e)	28 VHP	0	-
TX-0851	RIO BRAVO PIPELINE FACILITY	TX	140792, PSDTX1498, GHGPSDTX158	12/17/2018	FUGITIVES	-	0	-	Carbon Dioxide Equivalent (CO2e)	28 VHP	0	-
*VA-0325	GREENSVILLE POWER STATION	VA	52525	6/17/2016	GAS PIPING COMPONENTS-FUGITIVE LEAKS	-	0	-	Carbon Dioxide Equivalent (CO2e)	Audible/visual/olfactory (AVO) monitoring and leak repair	0	-
WY-0076	ROCK SPRINGS FERTILIZER COMPLEX	WY	MD-14824	7/1/2014	Fugitives	-	0	-	Carbon Dioxide Equivalent (CO2e)	Routine operation and maintenance of components	393	T/YR
MD-0045	MATTAWOMAN ENERGY CENTER	MD	PSC CASE. NO. 9330	11/13/2015	EQUIPMENT LEAKS	-	0	-	Carbon Dioxide Equivalent (CO2e)	IMPLEMENTATION OF AN AUDIO, VISUAL AND OLFACTORY (AVO) PROGRAM ON FILE AT POWER PLANT SITE FOR REVIEW UPON REQUEST BY THE AGENCY. LEAKS DETECTED SHALL BE REPAIRED WITHIN FIVE DAYS OF DISCOVERY.	0	-
MD-0046	KEYS ENERGY CENTER	MD	PSC CASE NO. 9297	10/31/2014	EQUIPMENT LEAKS	-	0	-	Carbon Dioxide Equivalent (CO2e)	IMPLEMENTATION OF AN AUDIO, VISUAL AND OLFACTORY (AVO) PROGRAM ON FILE AT POWER PLANT SITE FOR REVIEW UPON REQUEST BY THE AGENCY. LEAKS DETECTED SHALL BE REPAIRED WITHIN FIVE DAYS OF DISCOVERY.	0	-
*VA-0328	C4GT, LLC	VA	52588	4/26/2018	Equipment Leaks from Natural Gas Components	-	0	-	Carbon Dioxide Equivalent (CO2e)	Best management practices to prevent, detect and repair leaks of natural gas from the piping components.	0	-
TX-0858	GULF COAST GROWTH VENTURES PROJECT	TX	146425, PSDTX1518, GHGPSDTX170	6/12/2019	Fugitive Components	-	0	-	Carbon Dioxide Equivalent (CO2e)	TCEQ 28VHP and 28CNTQ leak detection and repair (LDAR) programs for piping components in VOC service	0	-
TX-0864	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	TX	N266, PSDTX1542, GHGPSDTX183	9/9/2019	Fugitive Components	-	0	-	Carbon Dioxide Equivalent (CO2e)	LDAR	500	PPMV

RBLC Entries for Greenhouse Gases Control from Equipment Leaks

RBLC ID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	PRIMARY FUEL	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT
TX-0865	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	TX	N264, PSDTX1540, GHGPSDTX182	9/9/2019	FUGITIVES	-	0	-	Carbon Dioxide Equivalent (CO2e)	28LAER & 28PI LDAR	0	-
TX-0876	PORT ARTHUR ETHANE CRACKER UNIT	TX	PSDTX1546 AND GHGPSDTX186	2/6/2020	FUGITIVES	-	0	-	Carbon Dioxide Equivalent (CO2e)	TCEQ 28VHP and 28CNTQ leak detection and repair (LDAR) programs	0	-
TX-0881	EXXONMOBIL BEAUMONT REFINERY	TX	49138, PSDTX1506M1, PSDTX768M2	1/10/2020	FUGITIVES	-	0	-	Carbon Dioxide Equivalent (CO2e)	Compliance with Refinery MACT fugitives and Texas 28VHP LDAR program.	0	-
TX-0884	PROPANE DEHYDROGENATION (PDH) UNIT	TX	N272, PSDTX1558, GHGPSDTX193	1/24/2020	FUGITIVES	-	0	-	Carbon Dioxide Equivalent (CO2e)	28LAER; In addition, utilize leak free pumps and compressors.	0	-
TX-0888	ORANGE POLYETHYLENE PLANT	TX	155952 PSDTX1556 GHGPSDTX192	4/23/2020	FUGITIVE COMPONENTS	-	0	-	Carbon Dioxide Equivalent (CO2e)	28 VHP, 28CNTA, 28PI leak detection and repair (LDAR) programs	0	-
*TX-0904	MOTIVA POLYETHYLENE MANUFACTURING COMPLEX	TX	156571, PSDTX1564, GHGPSDTX195	9/9/2020	FUGITIVES	-	0	-	Carbon Dioxide Equivalent (CO2e)	TCEQ 28VHP and 28CNTQ leak detection and repair (LDAR) programs	0	-
*TX-0906	PORT ARTHUR REFINERY	TX	6825A, PSDTX49M2, GHGPSDTX167M	10/30/2020	FUGITIVES	-	0	-	Carbon Dioxide Equivalent (CO2e)	TCEQ 28VHP (LDAR) program	0	-
*VA-0332	CHICKAHOMINY POWER LLC	VA	52610-1	6/24/2019	Equipment Leaks from Natural Gas Components	-	0	-	Carbon Dioxide Equivalent (CO2e)	Best management practices to prevent, detect and repair leaks of natural gas from the piping components.	0	-
*TX-0908	NEWMAN POWER STATION	TX	N284, PSDTX1090M1, GHGPSDTX199	8/27/2021	Fugitives	-	0	-	Carbon Dioxide Equivalent (CO2e)	weekly AVO	0	-

APPENDIX E. SUPPORTING DOCUMENTATION FOR BACT ANALYSES

Table E-1. Aeroderivative Simple Cycle Combustion Turbines Carbon Capture, Transportation, and Sequestration Cost Summary
BACT Economic Analysis
Reduction of CO_2 Emissions

Project Specific CO_2 Required to be Captured/Compressed (tpy)	See Note 1	705,830

Item	Basis	Cost ($)
Cost to Capture and Compression of CO_2		
Capital Expenditures		
Flue Gas Duct	See Note 2	$5,681,952
Direct Contact Cooler		$4,648,870
Booster Blower		$3,874,058
Amine System Including Reclaimer		$154,962,334
Compression/Dehy/Pumps		$37,622,738
Balance of Plant (instruments, site, buildings)		$20,661,645
Total Capital Cost for Capture/Compression		***$227,451,596***
Operation and Maintenance (O&M) Cost		
Utility Cost (Natural gas)	See Note 2	$21,839,941
Variable O&M (Maintenance Material Cost)		$4,132,329
Fixed O&M (Maintenance Labor Cost)		$18,779,540
Total O&M Cost		***$44,751,810***
Owner's Costs (startup and financing)	See Note 3	***$27,294,192***
Cost to Capture and Compression of CO_2	See Note 4	**$95,700,968**
Cost to Transport CO_2		
Project Specific CO_2 Required to be Captured (tpy)	See Note 1	705,830
Pipeline Length (miles)	See Note 2	20
Pipeline Diameter (inches)	See Note 2	8
Capital Expenditures		
Materials	See Note 5	$1,826,814
Labor		$7,187,631
Right-of-way (ROW) and Damages		$1,201,332
Miscellaneous (ex. Surveying, engineering, etc.,)		$2,620,530
CO_2 Surge Tank	See Note 6	$1,157,640
Pipeline Control System		$155,100
Booster Pump, kW	See Notes 6 and 7	$358,881
Total Capital Cost for Pipeline		***$14,507,928***
Operation and Maintenance (O&M) Cost		
Annual O&M Cost for Pipeline	See Notes 6 and 7	$169,000
Annual O&M Cost for Booster Pump		$30,052
Annual O&M Cost for CO_2 Surge Tank and Pipeline Control System		$52,510
Total O&M Cost		***$251,562***
Total Transportation Cost	See Note 4	**$3,153,148**

Table E-1. Aeroderivative Simple Cycle Combustion Turbines Carbon Capture, Transportation, and Sequestration Cost Summary
BACT Economic Analysis
Reduction of CO_2 Emissions

Cost to CO_2 Storage		
Capital Expenditures		
Injection Well Topside Facilities	See Note 2	$13,412,500
Injection Well	See Note 2	$36,612,500
Monitoring Well	See Note 2	$14,500,000
Dry Hole Remediations	See Note 2	$1,450,000
Total Capital Cost for Storage		**$65,975,000**
Operation and Maintenance (O&M) Cost		
Variable O&M (Maintenance Material Cost)	See Note 2	$9,722,808
Fixed O&M (Maintenance Labor Cost)	See Note 2	$3,298,750
Total O&M Cost		**$13,021,558**
Owner's Costs (startup and financing)	See Note 3	**$13,195,000**
CO_2 Storage Cost	See Note 4	**$28,855,558**
Total Annualized Cost (CO_2 Capture/Compression, Transport, and Storage)		**$127,709,674**
Cost Effectiveness (Total Annual Cost/tpy removed), $/tons CO_2 removed	See Note 8	**$181.0**

References:

[1]The amount of CO_2 captured is the sum of annual CO_2 emissions from turbines. Per U.S DOE, Carbon Capture Technology Program Plan (January 2013), a 90% capture efficiency is utilized for this cost analysis.

[2]Based on preliminary vendor data and engineering estimate.

[3]Owner's cost for CO_2 capture and compression and CO_2 storage are based on 12% and 20% of the total capital costs, respectively

[4]Assumes 5 year Capital Recovery on capital expenditure and owner's cost and annual operation and maintenance cost (for example, Total Annual Cost to Capture and Compression = (Total Capital Cost for Capture/Compression + Owner's Cost)/5 + Operation and Maintenance (O&M) Cost).

[5]Based on National Energy Technology Laboratory cost model, "FE/NETL CO_2 Transport Cost Model (2018): Description and User's Manual," DOE/NETL-2018/1877 using the Parker model (https://netl.doe.gov/projects/files/FENETLCO2TransportCostModel2018DescriptionandUsersManual_050718.pdf).

$$C_{png-par-i} = a_{i-0} + L \cdot (a_{i-1} \cdot D^2 + a_{i-2} \cdot D + a_{i-3})$$

Where:

$C_{png-par-i}$	= natural gas pipeline capital cost for category i (i = "mat" for materials, "lab" for labor, "ROW" for ROW & damages, or "misc" for miscellaneous) using the equation from Parker (cost in 2000 dollars [2000$]) [8]
L	= length of the pipeline (mi)
D	= standard diameter of pipeline (in)
a_{i-0}, a_{i-1}, a_{i-2}, a_{i-3}	= parameters that are determined by fitting the equation to the capital cost data

[6]Based on National Energy Technology Laboratory cost model, "FE/NETL CO2 Transport Cost Model (2018): Description and User's Manual," DOE/NETL-2018/1877. The costs are adjusted for inflation.

[7]Booster pump requirements are based on a pipeline inlet pressure and outlet pressure of 2,200 psig and 1,200 psig, respectively.

[8]The Cost Effectiveness (Total Annual Cost/tpy removed), $/tons CO_2 removed is consistent (adjusted for inflation, escalation, and contingency) with the IEA Greenhouse Gas R&D Programme, Technical Report 2019-07, Techno-Economic Evaluation of CO_2 Capture in LNG Plants, Oct. 2019. Available at: http://documents.ieaghg.org/index.php/s/rOIcXwQVNnfcIhk. Accessed July 2022

Table E-2. Aeroderivative Simple Cycle Combustion Turbine with Selective Catalytic Reduction (SCR)
BACT Economic Analysis
Reduction of NOx Emissions

Item[1]	Value	Unit
Rating at Full Load Capacity (B_{MW})	267	MMBtu/hour
Elevation Factor (ELEVF)	1.00	-
Retrofit Factor (RF)	0.80	-
Reagent Usage Rate (m_{sol})	2	gal/hour
Reagent ($Cost_{reag}$)	0.293	$/gallon for 29% ammonia
Total operating time for the SCR (t_{op})	8,760	hours
Electricity ($Cost_{elect}$)	0.0676	$/cubic foot
Catalyst cost ($CC_{replace}$)	250.61	$/cubic foot
Electricity Consumption (P)	137.29	kW
Number of SCR reactor chambers (n_{scr})	1	-
Number of catalyst layers (R_{layer})	3	-
Catalyst volume ($V_{catalyst}$)	2627	Cubic feet
Future worth factor (FWF)	0.3157	Fraction

Item	Basis[1]	Cost ($)
A. Total Capital Investment		
Total Capital Investment, TCI	$86{,}380 \times (200/B_{MW})^{0.35} \times B_{MW} \times ELEVF \times RF \times$ Adjusted Cost	$4,687,217
B. Direct Annual Costs		
(1) Annual Maintenance Cost	$0.005 \times TCI$	$23,436
(2) Annual Reagent Cost[2]	$m_{sol} \times Cost_{reag} \times t_{op}$	$23,446
(3) Annual Electricity Cost	$P \times Cost_{elect} \times t_{op}$	$81,300
(4) Annual Catalyst Replacement Cost	$n_{scr} \times Vol_{cat} \times (CC_{replace}/R_{layer}) \times FWF$	$69,275
TOTAL DIRECT ANNUAL COSTS (DAC)	(1) through (4)	$197,457
C. Indirect Annual Costs		
(5) Administrative Charges	0.03 x (Operator Cost + 0.4 x Annual Maintenance Cost)	$5,537
(6) Capital Recovery Costs	TCI * Capital Recovery Factor[3]	$392,320
(7) Property Tax	(0.01 x TCI)	$46,872
(8) Insurance	(0.01 x TCI)	$46,872
TOTAL INDIRECT ANNUAL COSTS (IAC)		$491,602
TOTAL ANNUAL COST = (B+C) = (Direct Annual Costs) + (Indirect Annual Costs)		**$689,059**

Cost Effectiveness		
NOx Emissions from Aeroderivative Simple Cycle Combustion Turbine without SCR[4]	tpy NOx	63.98
NOx Emissions from Aeroderivative Simple Cycle Combustion Turbine with SCR[5]	tpy NOx	6.40
Cost Effectiveness (Total Annual Cost/tpy removed)	**$/tons NOx removed**	**$11,967**

References:

[1] EAPCCM = EPA Air Pollution Control Cost Manual, Seventh Edition, Finalized June 2019. Calculated using default parameters in the EPA's "*SCR Cost Calculation Spreadsheet (xlsm)*". TCI was adjusted by 1.10411 for 2021 CEPCI value since the EPA's default value is based on 2016.

[2] $320/ton of ammonia based on best currently available information.

[3] The capital recovery factor, CRF, is a function of the equipment life and the opportunity cost of the capital (i.e., interest rate). For example, for a 10-year equipment life and a 7% interest rate, CRF = 0.1424.

[4] Based on proposed NOx annual emission for ASCCTs. Refer to Appendix B of the application.

[5] Assumes a NOx control efficiency of 90% based on U.S. EPA, AP-42, Section 1.4 Natural Gas Combustion.

Table E-3. Aeroderivative Simple Cycle Combustion Turbine with an Oxidation Catalyst
BACT Economic Analysis
Reduction of CO Emissions

Item	Basis[1]	Cost ($)
Direct Costs		
(1) Purchased equipment		
Oxidation Catalyst	See Note 2	$1,049,179
(a) Total Equipment		$1,049,179
(b) Instrumentation (0.1 x [1a])		$104,918
(c) Sales taxes (0.0895x [1a])		$93,902
(d) Freight (0.05x [1a])		$52,459
Total Purchased Equipment Cost, PEC	(1)(a) through (1)(d)	$1,300,458
(2) Direct Installation		
(a) Foundation (0.08 x PEC)		$104,037
(b) Handling (0.14 x PEC)		$182,064
(c) Electrical (0.05 x PEC)		$65,023
(d) Piping (0.02 x PEC)		$26,009
(e) Insulation (0.01 x PEC)		$13,005
(f) Painting (0.01 x PEC)		$13,005
Direct Installation Cost, DC	(2)(a) through (2)(f)	$403,142
TOTAL DIRECT COSTS, TDC	(1) and (2)	$1,703,600
Indirect Costs		
(3) Engineering (0.1 x PEC)		$130,046
(4) Construction (0.05 x PEC)		$65,023
(5) Contractor fees (0.1 x PEC)		$130,046
(6) Start-up (0.02 x PEC)		$26,009
(7) Performance test (0.01 x PEC)		$13,005
(8) Contingencies (0.10 x PEC)		$130,046
(9) Simple Interest During Construction (IDC)	3.25% interest rate, 10-year life	$553,670
TOTAL INDIRECT COSTS, TIC	(3) through (9)	$1,047,844
TOTAL CAPITAL INVESTMENT		
TOTAL CAPITAL INVESTMENT (TCI)	TDC + TIC	**$2,751,444**

References:
[1]EAPCCM = EPA Air Pollution Control Cost Manual, Sixth Edition, January 2002.
[2]Based on engineering estimates and best currently available information.

Table E-3. Aeroderivative Simple Cycle Combustion Turbine with an Oxidation Catalyst
BACT Economic Analysis
Reduction of CO Emissions

Item	Basis[1]	Cost ($)
A. Total Capital Investment		
Total Capital Investment, TCI	See previous page for detailed estimate	$2,751,444
B. Direct Annual Costs		
(1) Operating Labor		
(a) Operating Costs	See Note 2	$27,560
(b) Supervisor	= 0.15 x (1)(a)	$4,130
Annual Labor Cost, AC_{labor}	(1)(a) and (1)(b)	$31,690
(2) Maintenance		
(a) Labor	See Note 2	$32,710
(b) Material	= 100% of Maintenance Labor	$32,710
Maintenance Labor and Materials	(2)(a) and (2)(b)	$65,420
(3) Catalyst Replacement		
(a) Catalyst Cost	Catalyst Modules (See Note 2)	$158,875
(b) Sales Tax	Assume 0% Sales Tax	$0
(c) Catalyst Life	n	3
(d) Interest Rate	I (%)	3.25%
(e) CRF_b	Capital Recovery Factor for Replacement Parts	0.36
(f) Annual Cost	(Volume)(Unit cost)(CRF_b)	$56,440
TOTAL DIRECT ANNUAL COSTS (DAC)	(1) through (3)	$153,550
C. Indirect Annual Costs		
(4) Administrative charges (0.02 x TCI)		$55,029
(5) Property Tax (0.01 x TCI)		$27,514
(6) Insurance (0.01 x TCI)		$27,514
(7) Capital Recovery (CRF x TCI)	See Note 3	$319,981
TOTAL INDIRECT ANNUAL COSTS	(4) through (7)	$430,038
TOTAL ANNUAL COST = (B+C) = (Direct Annual Costs) + (Indirect Annual Costs)		**$583,588**
Cost Effectiveness		
CO Emissions from Aeroderivative Simple Cycle Combustion Turbine without Oxidation Catalyst[4]	tpy CO	96.03
CO Emissions from Aeroderivative Simple Cycle Combustion Turbine with Oxidation Catalyst[5]	tpy CO	19.21
Cost Effectiveness (Total Annual Cost/tpy removed)	**$/tons CO removed**	**$7,596**

References:

[1] EAPCCM = EPA Air Pollution Control Cost Manual, Sixth Edition, January 2002.

[2] Based on engineering estimates and best currently available information.

[3] The capital recovery factor, CRF, is a function of the equipment life and the opportunity cost of the capital (i.e., interest rate). For example, for a 10-year equipment life and a 7% interest rate, CRF = 0.1424.

[4] Based on proposed CO annual emission for ASCCTs. Refer to Appendix B of the application.

[5] Assuming 80% control efficiency.

Table E-4. Aeroderivative Simple Cycle Combustion Turbine with an Oxidation Catalyst
BACT Economic Analysis
Reduction of VOC Emissions

Item	Basis[1]	Cost ($)
Direct Costs		
(1) Purchased equipment		
Oxidation Catalyst	See Note 2	$1,049,179
(a) Total Equipment		$1,049,179
(b) Instrumentation (0.1 x [1a])		$104,918
(c) Sales taxes (0.0895x [1a])		$93,902
(d) Freight (0.05x [1a])		$52,459
Total Purchased Equipment Cost, PEC	(1)(a) through (1)(d)	$1,300,458
(2) Direct Installation		
(a) Foundation (0.08 x PEC)		$104,037
(b) Handling (0.14 x PEC)		$182,064
(c) Electrical (0.05 x PEC)		$65,023
(d) Piping (0.02 x PEC)		$26,009
(e) Insulation (0.01 x PEC)		$13,005
(f) Painting (0.01 x PEC)		$13,005
Direct Installation Cost, DC	(2)(a) through (2)(f)	$403,142
TOTAL DIRECT COSTS, TDC	(1) and (2)	$1,703,600
Indirect Costs		
(3) Engineering (0.1 x PEC)		$130,046
(4) Construction (0.05 x PEC)		$65,023
(5) Contractor fees (0.1 x PEC)		$130,046
(6) Start-up (0.02 x PEC)		$26,009
(7) Performance test (0.01 x PEC)		$13,005
(8) Contingencies (0.10 x PEC)		$130,046
(9) Simple Interest During Construction (IDC)	3.25% interest rate, 10-year life	$553,670
TOTAL INDIRECT COSTS, TIC	(3) through (9)	$1,047,844
TOTAL CAPITAL INVESTMENT		
TOTAL CAPITAL INVESTMENT (TCI)	TDC + TIC	**$2,751,444**

References:
[1]EAPCCM = EPA Air Pollution Control Cost Manual, Sixth Edition, January 2002.
[2]Based on engineering estimates and best currently available information.

Table E-4. Aeroderivative Simple Cycle Combustion Turbine with an Oxidation Catalyst
BACT Economic Analysis
Reduction of VOC Emissions

Item	Basis[1]	Cost ($)
A. Total Capital Investment		
Total Capital Investment, TCI	See previous page for detailed estimate	$2,751,444
B. Direct Annual Costs		
(1) Operating Labor		
(a) Operating Costs	See Note 2	$27,560
(b) Supervisor	= 0.15 x (1)(a)	$4,130
Annual Labor Cost, AC_{labor}	(1)(a) and (1)(b)	$31,690
(2) Maintenance		
(a) Labor	See Note 2	$32,710
(b) Material	= 100% of Maintenance Labor	$32,710
Maintenance Labor and Materials	(2)(a) and (2)(b)	$65,420
(3) Catalyst Replacement		
(a) Catalyst Cost	Catalyst Modules (See Note 2)	$158,875
(b) Sales Tax	Assume 0% Sales Tax	$0
(c) Catalyst Life	n	3
(d) Interest Rate	I (%)	3.25%
(e) CRF_b	Capital Recovery Factor for Replacement Parts	0.36
(f) Annual Cost	(Volume)(Unit cost)(CRF_b)	$56,440
TOTAL DIRECT ANNUAL COSTS (DAC)	(1) through (3)	$153,550
C. Indirect Annual Costs		
(4) Administrative charges (0.02 x TCI)		$55,029
(5) Property Tax (0.01 x TCI)		$27,514
(6) Insurance (0.01 x TCI)		$27,514
(7) Capital Recovery (CRF x TCI)	See Note 3	$383,708
TOTAL INDIRECT ANNUAL COSTS	(4) through (7)	$493,766
TOTAL ANNUAL COST = (B+C) = (Direct Annual Costs) + (Indirect Annual Costs)		**$647,316**
Cost Effectiveness		
VOC Emissions from Aeroderivative Simple Cycle Combustion Turbine without Oxidation Catalyst[4]	tpy VOC	23.22
VOC Emissions from Aeroderivative Simple Cycle Combustion Turbine with Oxidation Catalyst[5]	tpy VOC	18.58
Cost Effectiveness (Total Annual Cost/tpy removed)	**$/tons VOC removed**	**$139,388**

References:

[1] EAPCCM = EPA Air Pollution Control Cost Manual, Sixth Edition, January 2002.

[2] Based on engineering estimates and best currently available information.

[3] The capital recovery factor, CRF, is a function of the equipment life and the opportunity cost of the capital (i.e., interest rate). For example, for a 10-year equipment life and a 7% interest rate, CRF = 0.1424.

[4] Based on proposed VOC annual emission for ASCCTs. Refer to Appendix B of the application.

[5] Assuming 20% control efficiency.

Table E-5. Routing Condensate Storage Tank to Thermal Oxidizer
BACT Economic Analysis
Reduction of VOC Emissions

Item	Basis[1]	Cost ($)
Direct Costs		
(1) Purchased equipment		
Regenerative Thermal Oxidizer		$295,704
(a) Total Equipment		$295,704
(b) Instrumentation (0.1 x [1a])		$29,570
(c) Sales taxes (0.0795x [1a])		$23,508
(d) Freight (0.05x [1a])		$14,785
Total Purchased Equipment Cost, PEC	(1)(a) through (1)(d)	$363,568
(2) Direct Installation		
(a) Foundations and Supports (0.08 x PEC)		$29,085
(b) Handling and Erection (0.14 x B)		$50,900
(c) Electrical (0.04 x PEC)		$14,543
(d) Piping (0.02 x PEC)		$7,271
(e) Insulation (0.01 x PEC)		$3,636
(f) Painting (0.01 x PEC)		$3,636
Direct Installation Cost, DC	(2)(a) through (2)(f)	$109,070
TOTAL DIRECT COSTS, TDC[2]	(1) and (2)	$472,639
Indirect Costs		
(3) Engineering (0.10 x PEC)		$36,357
(4) Construction and field expenses (0.05 x PEC)		$18,178
(5) Contractor fees (0.10 x PEC)		$36,357
(6) Start-up (0.02 x PEC)		$7,271
(7) Performance test (0.01 x PEC)		$3,636
TOTAL INDIRECT COSTS, TIC	(3) through (7)	$101,799
Contingency Cost (C)	Contingency Factor (10%) x (TDC + TIC)	$57,444
TOTAL CAPITAL INVESTMENT		
TOTAL CAPITAL INVESTMENT (TCI)	TDC + TIC + C	**$631,881**

References:
[1] EPA Air Pollution Control Cost Manual, Sixth Edition, January 2002.
[2] Based on engineering estimates and best currently available information.

Table E-5. Routing Condensate Storage Tank to Thermal Oxidizer
BACT Economic Analysis
Reduction of CO Emissions

Costs		
A. Total Capital Investment		
Total Capital Investment, TCI	See previous page for detailed estimate	$631,881
B. Direct Annual Costs[1]		
(1) Annual Electricity Cost	Fan Power Consumption x Operating Hours/year x Electricity Price	$18,718
(2) Operating Labor Costs		
(a) Operator	Operator Hours/Year × Labor Rate	$20,720
(b) Supervisor	15% of Operator	$3,108
(3) Maintenance Costs		
(a) Labor	0.5 hours/shift x Labor Rate x (Operating Hours/8 hours/shift)	$15,266
(b) Materials	100% of Maintenance Labor	$15,266
(4) Annual Natural Gas Cost	See Note 2	$10,512,000
Total Direct Annual Costs (DAC)	(1) through (4)	$10,585,078
C. Indirect Annual Costs[1]		
(5) Overhead	60% of sum of operator, supervisor, maintenance labor Plus maintenance materials	$32,616
(5) Administrative Charges	2% of TCI	$12,638
(5) Property Taxes	1% of TCI	$6,319
(5) Insurance	1% of TCI	$6,319
(5) Capital Recovery	CRF[3] x TCI	$43,473
Total Indirect Annual Costs		$101,365
TOTAL ANNUAL COST = (B+C) = (Direct Annual Costs) + (Indirect Annual Costs)		**$10,686,443**
Cost Effectiveness		
VOC Emissions without routing to Thermal Oxidizer[4]	tpy VOC	0.52
VOC Emissions with routing to Thermal Oxidizer[5]	tpy VOC	0.01
Cost Effectiveness (Total Annual Cost/tpy removed)	**$/tons VOC removed**	**$20,758,436.79**

References:

[1] EPA Air Pollution Control Cost Manual, Sixth Edition, January 2002.

[2] Based on engineering estimates and best currently available information.

[3] The capital recovery factor, CRF, is a function of the equipment life and the opportunity cost of the capital (i.e., interest rate). For example, for a 10-year equipment life and a 7% interest rate, CRF = 0.1424.

[4] Refer to Appendix B of the application.

[5] Minimum VOC destruction rate of thermal oxidizer is assumed to be 99%.

APPENDIX F. CERTIFICATE OF GOOD STANDING

State of Louisiana Secretary of State

COMMERCIAL DIVISION
225.925.4704

Fax Numbers
225.932.5317 (Admin. Services)
225.932.5314 (Corporations)
225.932.5318 (UCC)

Name	Type	City	Status
VENTURE GLOBAL CP EXPRESS, LLC	Limited Liability Company (Non-Louisiana)	WILMINGTON	Active

Previous Names

Business: VENTURE GLOBAL CP EXPRESS, LLC
Charter Number: 44325209Q
Registration Date: 3/17/2021

Domicile Address
1209 ORANGE STREET
WILMINGTON, DE 19801

Mailing Address
1001 19TH STREET NORTH
SUITE 1500
ARLINGTON, VA 22209

Principal Business Office
1001 19TH STREET NORTH
SUITE 1500
ARLINGTON, VA 22209

Registered Office in Louisiana
3867 PLAZA TOWER DR.
BATON ROUGE, LA 70816

Principal Business Establishment in Louisiana
3867 PLAZA TOWER DR.
BATON ROUGE, LA 70816

Status

Status: **Active**
Annual Report Status: **In Good Standing**
Qualified: 3/17/2021
Last Report Filed: 3/14/2022
Type: Limited Liability Company (Non-Louisiana)

Registered Agent(s)

Agent: C T CORPORATION SYSTEM
Address 1: 3867 PLAZA TOWER DR.
City, State, Zip: BATON ROUGE, LA 70816
Appointment 3/17/2021

Date:

Officer(s)

Additional Officers: No

Officer:	VENTURE GLOBAL LNG, INC.
Title:	Member
Address 1:	1001 19TH STREET NORTH
Address 2:	SUITE 1500
City, State, Zip:	ARLINGTON, VA 22209

Amendments on File

No Amendments on file

Print

APPENDIX G. AIR QUALITY DISPERSION MODELING REPORT

CLASS II AREA AIR DISPERSION MODELING REPORT

CP EXPRESS

Venture Global CP Express, LLC
Moss Lake Compressor Station

TRINITY CONSULTANTS
301 Main Street
Suite 900
Baton Rouge, LA 70825
(225) 346-4003

July 2022

Project No. 221901.0053

Trinity Consultants

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1. INTRODUCTION

Venture Global CP Express, LLC (CP Express), a wholly owned subsidiary of Venture Global LNG, Inc. (Venture Global LNG), proposes to site, construct, and operate the Moss Lake Compressor Station, a natural gas compressor station near Moss Lake in Calcasieu Parish, Louisiana. The compressor station will recompress natural gas through transmission lines using gas turbine-driven compressor units to facilitate natural gas delivery through pipelines to Venture Global CP2 LNG, LLC's proposed liquefied natural gas (LNG) terminal in Cameron Parish, Louisiana (Terminal Facilities). CP Express is submitting an air permit application to the Louisiana Department of Environmental Quality (LDEQ) to request authorization to construct and operate the Moss Lake Compressor Station in accordance with the LDEQ Title V Operating Permits Program and Prevention of Significant Deterioration (PSD) Program. In support of the air permit application, CP Express is submitting this air dispersion modeling analyses to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS) and PSD Increment Standards for the proposed Moss Lake Compressor Station.

On January 10, 2022, a modeling protocol describing the Class II air dispersion modeling methodology for Terminal Fcailities was submitted to the LDEQ. For the proposed Moss Lake Compressor Station, the same air dispersion modeling procedures outlined in the Terminal Facilities modeling protocol were utilized. On behalf of CP Express, Trinity has performed the air dispersion modeling analyses and prepared this air dispersion modeling report for the proposed Moss Lake Compressor Station.

1.1 PROJECT DESCRIPTION

The Moss Lake Compressor Station will be located on approximately 60 acres of land in Calcasieu Parish, Louisiana near Moss Lake. The Moss Lake Compressor Station will be constructed in two phases: in Phase 1, two 34,800 horsepower (hp) natural gas-fired compressor units will be installed and in Phase 2, three 34,800 hp natural gas-fired compressor units and one 13,000 hp booster gas-driven compressor unit will be installed. Natural gas will be transported to the Moss Lake Compressor Station via a natural gas pipeline owned and operated by CP Express. Condensate will be separated from the natural gas and stored in a storage tank until subsequent loadout via truck. Five natural gas-fired turbines will be utilized to drive the compressor units to transport the natural gas via pipeline to the Terminal Facilities. Five emergency generators will be located on-site for emergency power.

1.2 STATIONARY SOURCE EMISSIONS

Based on the facility-wide (PTE) emissions, PSD review is required for nitrogen oxides (NO_X), particulate matter equal to and less than 10 microns in aerodynamic diameter (PM_{10}), particulate matter equal to and less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$), and carbon monoxide (CO). In addition, PSD review is also required for volatile organic compounds (VOCs) and Greenhouse gases (GHGs), but neither VOCs nor GHGs require modeling. As shown in Table 1-1, the facility's PTE will exceed the PSD major source threshold of 250 tpy for NO_X and CO, and therefore, triggers PSD review for these pollutants. Since PSD review is triggered for NO_X and CO, all other pollutants are compared against their respective Significant Emission Rate (SER). Refer to Section 2.2 of the Initial Title V and PSD Permit Application (Application) for additional information on PSD Applicability analysis.

Table 1-1. PSD Applicability Analysis Summary

Pollutant	Emissions	PSD SER	PSD SER Exceeded?
	(tpy)	(tpy)	(Yes/No)
PM_{10}	100.40	15	Yes
$PM_{2.5}$	100.40	10	Yes
NO_X	323.45	40	Yes
SO_2	3.80	40	No
CO	482.10	100	Yes
VOC	144.86	40	Yes
Lead	--	0.6	No
H_2S	0.06	10	No
CO_2e	726,818	75,000	Yes

In accordance with Title 40 of the Code of Federal Regulations (CFR) Part 52.21, a demonstration of compliance with NAAQS and PSD Increment standards is required for the construction of new major stationary sources or major modifications at existing stationary sources in areas designated as attainment or unclassifiable under the Clean Air Act (CAA). The proposed Moss Lake Compressor Station is a new major stationary source. Therefore, the Moss Lake Compressor Station is required to demonstrate compliance with all applicable NAAQS and PSD Increment standards.

1.3 REPORT OVERVIEW

This modeling report describes the methodology used to perform the air dispersion modeling analyses required to demonstrate compliance with the NAAQS and PSD Increment standards for the proposed Moss Lake Compressor Station. The modeling results presented in this report were determined by using the current U.S. EPA and LDEQ modeling guidelines.[1,2]

Section 2 describes the modeling methodology, which includes a discussion of the PSD Significance Analysis, NAAQS Analysis, and PSD Increment Analysis. The PSD Significance Analysis was also used for preconstruction monitoring analysis.

Section 3 describes the air dispersion model and inputs used for this air dispersion modeling analyses, which includes a discussion of the meteorological data, land use and topography, Good Engineering Practice (GEP) Stack Height Analysis, building wake effects, receptor grid, and the model source parameters.

Section 4 includes a brief discussion of the Additional Impacts Analysis.

Section 5 presents the results of the air dispersion modeling analyses. The site location map of the Moss Lake Compressor Station is included in Appendix A. The modeled stack parameters and emission rates for the Moss Lake Compressor Station are included in Appendix B. Appendix C includes the windrose diagram

[1] Federal Register Vol. 82, No. 10, pp. 5182 – 5235. Codified at 40 CFR Part 51, Appendix W.
[2] Air Quality Modeling Procedures, Air Quality Assessment Division, LDEQ, Aug. 2006.

for all five meteorological years (2016-2019 and 2021).[3] All electronic modeling files are provided in Appendix D. The offsite emissions inventory for NAAQS/PSD Increment Analysis is provided in Appendix E.

[3] The meteorlogical data is incomplete for 2020. Therefore, per discussions with LDEQ, meteorological data from 2016-2019 and 2021 was used for this air dispersion modeling analyses.

2. AIR DISPERSION MODELING METHODOLOGY

This section describes the air dispersion modeling methodologies that have been used to demonstrate that emissions from the Moss Lake Compressor Station will not cause or significantly contribute to a violation of the NAAQS and PSD Increment standards. The dispersion modeling analyses were conducted in consideration of the following guidance documents:

- *Guideline on Air Quality Models 40 CFR 51, Appendix W (EPA, Jan. 17, 2017)*
- User's Guide for the AMS/EPA Regulatory Model – AERMOD, (EPA, Apr. 2021)
- AERMOD Implementation Guide (EPA, Jul. 2021)
- New Source Review Workshop Manual (EPA, Draft, Oct. 1990)
- Modeling Procedures for Demonstrating Compliance with $PM_{2.5}$ NAAQS (EPA, Memorandum from Mr. Stephen Page, Mar. 23, 2010)
- LDEQ's Air Quality Modeling Procedures Document (LDEQ, Aug. 2006)
- Guidance for $PM_{2.5}$ Permit Modeling (EPA, Memorandum from Mr. Stephen Page, May 20, 2014)
- DRAFT Guidance for Ozone and Fine Particulate Matter Permit Modeling (Feb. 10, 2020)
- Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier I Demonstration Tool for Ozone and $PM_{2.5}$ under the PSD Permitting Program (EPA, Memorandum from Mr. Richard A Wayland, Apr. 30, 2019)
- Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program (EPA Memorandum from Mr. Peter Tsirigotis, Apr. 17, 2018)
- Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO_2 National Ambient Air Quality Standard (EPA, Memorandum from Mr. Tyler Fox, Mar. 1, 2011); and
- Clarification on the Use of AERMOD Dispersion Modeling for Demonstrating Compliance with the NO_2 National Ambient Air Quality Standard (EPA, Memorandum from Mr. R. Chris Owen and Roger Brode, Sep. 30, 2014).

2.1 CLASS II PSD MODELING ANALYSES

The three principle steps of the standard PSD Class II area air quality modeling analysis are the Significance Analysis, the NAAQS analysis, and the PSD Increment analysis. The NAAQS and PSD Increment analyses are also commonly referred to together as a "full-impacts" or "cumulative" analysis. Per the U.S. EPA Guideline, the Significance Analysis considers the emissions associated only with the proposed project to determine if it will have a significant impact upon the surrounding area. For all applicable pollutants and their respective averaging periods, the modeled maximum ground-level concentrations are compared to the corresponding Significant Impact Levels (SILs) to determine if any predicted concentrations at any receptor locations are "significant." If predicted impacts for a particular pollutant and averaging period are below the applicable SIL(s), then no further analyses (i.e., NAAQS and PSD increment analyses) are required for that pollutant-averaging period.

If the Significance Analysis reveals that maximum modeled ground-level concentrations for a particular pollutant and averaging period are greater than or equal to the applicable SIL, a full-impact analysis is required. A full-impact analysis considers ambient background concentration, along with emissions from regional sources and is performed at receptors with impacts greater than the SIL identified in the Significance Analysis. Additionally, if the modeling results from the Significance Analysis are above the applicable modeling *de minimis* concentrations for any pollutant-averaging period, then pre-construction ambient monitoring requirements must be addressed. A summary of the tasks that are performed in

standard PSD Class II area air quality modeling analysis is presented in the flow chart provided as Figure 2-1.

Figure 2-1. General PSD Class II Area Modeling Flowchart

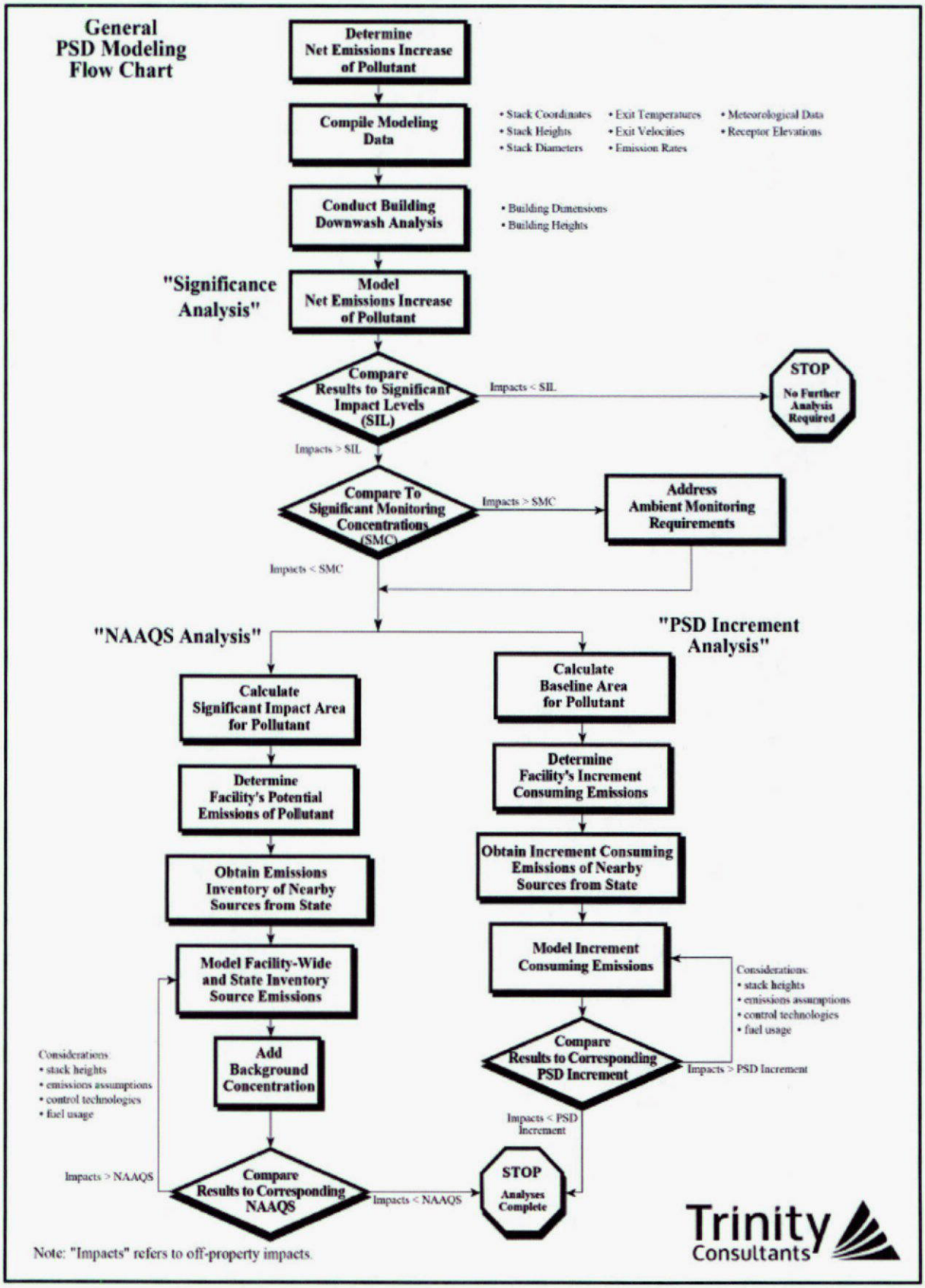

Table 2-1 lists the applicable standards for criteria pollutants that were modeled for the proposed Moss Lake Compressor Station.

Table 2-1. Applicable Air Quality Standards

Pollutant	Averaging Period	SIL (µg/m³)	Monitoring *de minimis* Concentration (µg/m³)	PSD Class II Increment (µg/m³)	Primary NAAQS (µg/m³)
CO	1-hour	2,000	N/A	N/A	40,000
	8-hour	500	575	N/A	10,000
NO_2	1-hour	7.5[4]	N/A	N/A	188
	Annual	1	14	25	100
PM_{10}[5]	24-Hour	5	10	30	150
	Annual	--	--	17	Revoked
$PM_{2.5}$	24-Hour	1.2	Revoked	9	35
	Annual	0.2[6]	N/A	4	12

The highest concentrations out of all given modeling years for each pollutant-averaging period are then compared to the SIL shown in Table 2-1 to determine if the ambient air impact is significant.

For 1-hour NO_2, 1-hour CO, and 8-hour CO averaging periods, a concatenated meteorological data set to derive the appropriate form of the NAAQS was utilized. For annual NO_2 averaging period, each individual year was modeled separately to evaluate the maximum annual impacts. When modeled design concentrations are less than the applicable SIL, further analyses (NAAQS and PSD Increment) are not required for that pollutant-averaging period. If modeled impacts are greater than the SIL, a NAAQS and PSD Increment analysis is required for that pollutant and averaging period to demonstrate that the Moss Lake Compressor Station neither causes nor contributes to the violation of NAAQS and PSD Increment Standards.

2.1.1 Special Considerations for NO_2 and Treatment of Intermittent Sources

CP Express utilized the EPA's Tier II Ambient Ratio Method 2 (ARM2) option in AERMOD from the 2017 version (82 FR 5182) of 40 CFR Part 51, Appendix W (Guideline on Air Quality Models) for converting modeled NO_X emission rates to modeled NO_2 impacts.[7] In addition, consistent with U.S. EPA guidance[8], intermittent sources of NO_2 emissions were not included in the 1-hr modeling analysis. The following sources from the Moss Lake Compressor Station will be operated on a periodic or emergency basis and were considered to be intermittent sources:

---

[4] Based on U.S. EPA Memorandum from Stephen D. Page to Regional Air Division Directors titled, "Guidance Concerning the Implementation of the 1-hour NO_2 NAAQS for the Prevention of Significant Deterioration Program," June 29, 2010.
[5] EPA revoked the annual PM_{10} NAAQS in 2006. Available at: https://www.epa.gov/pm-pollution/2006-national-ambient-air-quality-standards-naaqs-particulate-matter-pm25#:~:text=With%20regard%20to%20primary%20standards%20for%20particles%20generally%20less%20than,primary%20PM%20standards%2C%20as%20revised. Accessed July 2022.
[6] U.S. Environmental Protection Agency Memorandum. "Guidance on Significant Impact levels for Ozone and Fine Particles in the Prevention of Signifcant Deterioration Permitting Program". April 17, 2018. Available at: https://www.epa.gov/sites/production/files/2018-04/documents/sils_guidance_2018.pdf. Accessed July 2022.
[7] Code of Federal Regulations, Title 40–Protection of Environment, Part 51, Appendix W.
[8] Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO_2 National Ambient Air Quality Standard (EPA, Memorandum from Mr. Tyler Fox, March 1, 2011).

- Five (5) emergency generators **(100 hours/year/engine)**

2.2 PSD SIGNIFICANCE ANALYSIS

The PSD Significance Analysis consists of three separate determinations:

- The Significant Impact Analysis;
- An Area of Impact (AOI) Analysis; and
- A Preconstruction Monitoring Analysis.

2.2.1 Significant Impact Analysis

The Significant Impact Analysis (significance modeling) determines whether a full-impacts analysis (i.e., NAAQS and PSD Increment modeling) is required for compliance with 40 CFR 52.21. For each pollutant that requires PSD review, significance modeling incorporates all project sources, project-affected sources, and any emissions sources that have emissions increases or decreases within the project's contemporaneous period. The contemporaneous period is a timeframe based on the date five years before the projected commencement of construction of the new project, up to and including the date when emissions from the new project are expected to begin. The modeled emission rates should reflect the net emissions change (increase or decrease) from the project. The net emissions increase as determined for the PSD applicability analysis will be modeled as part of the significance modeling.

The significance modeling compares the maximum concentrations from the significance model results to the appropriate SILs as shown in Table 2-1. If the maximum concentration for each modeled pollutant-averaging period is less than its respective SIL, the proposed Moss Lake Compressor Station impact is not significant and no further modeling is required. If the maximum concentration for any pollutant-averaging period is greater than or equal to its respective SIL, then a full-impacts analysis would be required.

2.2.2 Area of Impact (AOI) Analysis

If the results from the significance modeling indicate that any of the respective SILs are exceeded, then an AOI Analysis must be performed. A circle is drawn around the facility that has a radius equal to the distance from the center of the facility to the furthest *significant* off-property receptor. *U.S. EPA Guidance*[9] recommends that the calculated AOI should not exceed 50 km due to accuracy constraints of AERMOD. The AOI influences the full impact analysis in two ways:

- The facility must place receptors within the AOI for NAAQS and PSD Increment modeling; and
- The facility must obtain an off-property emissions inventory from the LDEQ based upon the AOI plus 15 kilometer (km). Based on the recent LDEQ guidance, CP Express obtained an offsite emissions inventory for an additional 5 km beyond the AOI+15 km (i.e., AOI + 20 km) to include major sources beyond AOI + 15 km and within AOI + 20 km.

2.2.3 Preconstruction Monitoring Analysis

The U.S. EPA monitoring *de minimis* concentrations establish the levels at which a facility needs to address pre-construction ambient air quality monitoring for applicable pollutants subject to PSD review. The relevant monitoring *de minimis* concentrations are listed in Table 2-1. If the significance modeling shows that maximum modeled concentrations from the affected emissions sources do not exceed the monitoring *de*

[9] *Guideline on Air Quality Models* 40 CFR 51, Appendix W (EPA, January 17, 2017).

minimis concentrations for the modeled pollutants, pre-construction monitoring may be avoided. If the significance modeling shows that maximum modeled concentrations from the modeled emission sources exceed the *de minimis* concentrations for any of the modeled pollutants, monitoring may be required for up to 12 months prior to construction of the proposed Moss Lake Compressor Station.

2.3 NAAQS ANALYSIS

The NAAQS define the maximum permissible concentrations of certain pollutants in the atmosphere.[10] For criteria pollutants with a significant impact, the PSD analysis requires additional modeling that includes a NAAQS analysis. The NAAQS analysis requires the addition of the maximum modeled concentrations for each applicable pollutant and averaging period to the appropriate ambient monitoring concentration to demonstrate compliance with the NAAQS standards. Table 2-1, provided earlier, presents the NAAQS for the pollutants that are modeled for the Moss Lake Compressor Station.

For each pollutant and averaging period that requires a NAAQS analysis, both the facility-wide and off-property sources with the appropriate ambient background concentration were utilized to demonstrate compliance with the NAAQS. The off-property inventory includes all emission sources located within 20 km beyond the AOI for each pollutant. Per LDEQ guidance, only major sources beyond AOI + 15 km and within AOI + 20 km were included in the NAAQS analysis. In addition, the receptors that are greater than or equal to the SIL for each applicable pollutant and averaging period within the AOI were included in the NAAQS analysis. For off-property inventory sources, necessary refinements were incorporated in the NAAQS models based on the publicly available information. The most recent permitted emission inventories (off-property emission sources) for all applicable pollutants were obtained from the LDEQ Emissions Reporting and Inventory Center (ERIC).

The modeled design concentration for each applicable pollutant and averaging period was calculated by adding the appropriate modeled concentration from the NAAQS model to the monitored background concentration for the surrounding area. If the modeled design concentration is less than the applicable NAAQS, then the proposed Moss Lake Compressor Station does not cause nor contribute to violation of the NAAQS and no further analysis is required. If the modeled design concentration is greater than or equal to the NAAQS standard, a culpability analysis was performed to determine the Moss Lake Compressor Station contribution to the potential violation of the NAAQS standard. The NAAQS analysis demonstrates that the proposed Moss Lake Compressor Station will not cause nor contribute to a violation of NAAQS.

2.4 NAAQS CULPABILITY ANALYSIS

A source is not considered to have caused or contributed to the NAAQS violation if its impact is not significant (*i.e.*, the source's contribution to the modeled NAAQS violations is less than the SIL) at the receptor at the time of the predicted NAAQS exceedances. In the NAAQS culpability analysis, CP Express identified all receptor locations and events (i.e., month, day, year, and hour) for the modeled exceedances for further analysis to demonstrate compliance with the NAAQS.

[10] Oklahoma Enviornmental Quality. Available at: https://www.deq.ok.gov/air-quality-division/ambient-monitoring/national-ambient-air-quality-standards/. Accessed July 2022.

2.5 PSD INCREMENT ANALYSIS

For pollutants, for which a PSD Increment standard is applicable, with a modeled concentration greater than the respective SILs indicated in Table 2-1, PSD regulations require a PSD Increment analysis. The federal government has three PSD Increment zoning classifications as detailed below:

- A Class I area for restricted industrial growth (federal protected lands, etc.);
- A Class II area for controlled industrial growth; and
- A Class III area for expanded industrial growth.

The proposed Moss Lake Compressor Station is located in a Class II area; therefore, PSD Class II Increment standards will apply. Table 2-1 presents the Class II PSD Increment standards for pollutants that were modeled for the proposed Moss Lake Compressor Station.

As a conservative approach, the SIL/NAAQS modeling results were utilized to compare against the respective PSD Increment Standards for annual NO_2 and annual $PM_{2.5}$. For 24-hr $PM_{2.5}$ Increment model, CP Express conservatively included all major sources PTE emissions located within AOI + 20 km.

For each applicable pollutant and their respective averaging period, the sum of the impact from the Project's net emissions increase and the appropriate off-property emission sources was compared against their respective PSD Increment standard to demonstrate compliance. If the maximum modeled concentration is less than the PSD Increment standards for applicable pollutants and its averaging periods, the proposed Moss Lake Compressor Station will not cause or contribute to a PSD Increment exceedance. The PSD Increment analysis demonstrates that the proposed Moss Lake Compressor Station will neither cause nor contribute to an exceedance of any PSD Increment standards.

2.6 SECONDARY $PM_{2.5}$ AND OZONE IMPACT ANALYSIS

The emissions of the secondary $PM_{2.5}$ precursor NO_X and ozone precursors NO_X and VOC from the Moss Lake Compressor Station exceeds their respective significant emission rates (SERs) as shown in Table 1-2. Therefore, CP Express performed an ambient air quality impact analysis considering the secondary $PM_{2.5}$ and ozone as required in 40 CFR 52.21. CP Express performed the Tier 1 assessment to satisfy the requirements of both ambient impact analyses using the latest Modeled Emission Rates for Precursors (MERPs) guidance from the U.S. EPA issued on April 30, 2019.[11]

Specifically, CP Express utilized the steps outlined in Figures 3-1 and 4-1 and example scenarios in Section 4 of the MERPs guidance to complete the Tier 1 assessment. Based on a comparison of the source characteristics and chemical/physical environment of the Moss Lake Compressor Station and Louisiana – Acadia hypothetical source (FIPS 22001), CP Express determined Louisiana – Acadia is the technically credible hypothetical source to utilize in the Tier 1 MERPs assessment for ozone and secondary $PM_{2.5}$. The detailed comparison and the numerical analysis quantifying the proposed Moss Lake Compressor Station's ambient air quality impacts (including the combined impact of primary and secondary $PM_{2.5}$) is provided under Appendix H of the Application.

[11] U.S. Environmental Protection Agency. "Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and $PM_{2.5}$ under the PSD Permitting Program." April 30, 2019. Available at: https://www.epa.gov/sites/production/files/2020-09/documents/epa-454_r-19-003.pdf. Accessed July 2022.

3. CLASS II AREA AIR DISPERSION MODELING ANALYSES

Section 3.1 describes the computer models utilized for the air dispersion modeling analyses. Section 3.2 describes the meteorological data used for the air dispersion modeling analyses. Section 3.3 describes the background monitor selection. Section 3.4 describes the topography of the area surrounding Moss Lake Compressor Station. Section 3.5 describes the stack height analysis for each modeled emission source. Section 3.6 describes the building wake (downwash) analysis for all the buildings situated within the Moss Lake Compressor Station. Section 3.7 describes the receptor grids used in the model. Section 3.8 describes the modeled emission rates and Section 3.9 describes the default source parameters used in the analyses for off-property sources, when actual parameters were not available.

3.1 DISPERSION MODEL SELECTION

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) is the U.S. EPA-recommended model for evaluating near-field impacts (*i.e.*, source receptor distances of less than or equal to 50 km). The AERMOD modeling system is composed of three modular components: AERMAP, the terrain preprocessor; AERMET, the meteorological preprocessor; and AERMOD, the control module and modeling processor. Additionally, a fourth processor, the AERSURFACE tool, is used to estimate surface characteristics required for input to AERMET. As discussed in the modeling protocol, the following versions of each processor was used, including: AERMOD, version 21112; AERMET, version 21112; AERMAP, version 18081; and AERSURFACE, version 20060. All AERMOD dispersion modeling was performed using the regulatory default option.

3.2 METEOROLOGICAL DATA

The EPA AERMOD program requires meteorological data that has been preprocessed with the AERMET program. Three additional variables are considered when preprocessing the surface and meteorological data for a site. These variables are:

- Surface roughness;
- Albedo; and
- Bowen Ratio.

The EPA has developed a software program called AERSURFACE that was used to determine realistic and reproducible surface characteristics values, including Albedo, Bowen Ratio, and Surface roughness parameters. AERSURFACE requires the input of land cover data from the United States Geological Survey (USGS) National Land Cover Data 2016 (NLCD 2016), which it uses to determine the values of surface characteristics based on the land cover type for the study area. AERSURFACE was used to determine the surface characteristics values for the area surrounding the NWS station for input to AERMET. The 2020 meteorological data for Lake Charles Regional Airport has not met U.S. EPA's requirement for 90% completeness by quarter for wind direction, wind speed, and temperature. Therefore, per discussions with LDEQ, CP Express utilized the 2016 through 2019 and 2021 meteorological data for this modeling analyses. These data was processed in AERMET using the surface characteristics values generated by AERSURFACE.

3.3 BACKGROUND MONITOR SELECTION

Per U.S. EPA guidance, background concentration for each modeled pollutant must be added to the modeled impacts to estimate the total predicted impact prior to comparison with the NAAQS. The

background concentration includes emissions from non-industrial emission sources (e.g., vehicles, recreational watercraft, etc.), which are not included in this air dispersion modeling analyses. However, the background concentration may also include industrial emission sources already accounted for in the off-property emissions inventory. Therefore, adding the background concentrations to the modeled concentrations should be conservative since impacts from the already operational stationary off-property inventory sources are included in both the modeled and the background concentrations.

Background monitors for NAAQS analysis were chosen based on representativeness. The ambient monitoring data reflect the latest three years (2019-2021) data. The most representative monitors are located in Deer Park, TX, Westlake, LA, Vinton, LA, and West Orange, TX. The 2021 $PM_{2.5}$ annual mean monitored data for Vinton, LA monitoring station does not satisfy the minimum data completeness criteria. Therefore, the $PM_{2.5}$ annual background concentration was based on West Orange, TX monitoring station which is the next closest and representative monitor. Each of these locations has either a similar or a more conservative industrial emissions portfolio compared to the Moss Lake Compressor Station for the modeled pollutants. Non-industrial emissions sources, such as vehicles are also anticipated to have the same or more conservative density compared to the Moss Lake Compressor Station's surrounding area. The locations and relevant information for each monitor selected for NAAQS and PSD Increment analyses are provided in Table 3-1.

Table 3-1. Background Monitor Concentrations

Pollutant	Averaging Period	Rank	Monitor Location	Distance from Facility (km)	2019 (µg/m³)	2020 (µg/m³)	2021 (µg/m³)	Monitor Design Value (µg/m³)	Primary NAAQS (µg/m³)
CO	1-hour	2nd	Deer Park, TX	~175	1,718.4	1,718.4	1,718.4	1,718.4	40,000
NO_2	1-hour	98th percentile	Westlake, LA	~53	73.4	60.2	54.6	62.7	188
	Annual	Mean			14.2	13.0	9.5	12.2	100
SO_2	1-hour	99th percentile			36.6	36.6	28.8	34.0	196
	3-hour [1]	2nd			44.2	43.7	34.0	44.2	1,300
	24-hour	2nd			12.0	9.9	9.9	12.0	365
$PM_{2.5}$	24-Hour	98th percentile	Vinton, LA	~55	14.0	22.0	16.0	17.3	35
	Annual	Mean	West Orange, TX	~70	8.2	8.7	7.8	8.7	12

[1] No data is available for SO_2 3-hour averaging period. Therefore, 1-hour high-2nd high data was used as conservative estimate.

3.4 TERRAIN ELEVATIONS

The terrain elevation for each modeled building, source, and receptor was determined using National Elevation Datasets (NED) data. The terrain height for each modeled receptor was calculated using AERMAP (version 18081), a terrain preprocessor developed specifically for the AERMOD model. AERMAP computes the terrain height and hill height scale from the digital terrain elevations surrounding the modeled receptors. AERMAP also computes the terrain height for modeled sources and buildings. AERMAP was used to search for the terrain height and location that has the greatest influence on dispersion for an individual receptor.

3.5 GEP STACK HEIGHT

A GEP stack height evaluation determines if avoidance of building wake effects allow a point source to be modeled at a height greater than 65 meters.

The GEP formula stack height is the greater of 65 meters or (Hb + 1.5L),

Where:

Hb is the building height, and

L is the lesser of the building's height or maximum projected width.

These procedures follow the U.S. EPA Guidelines for Determination of GEP Stack Height.[12] This equation only applies to stacks located within 5L of a surrounding structure. In the absence of influencing structures for a specific source, a default GEP height of 65 meters is used. The downwash structure heights, locations and dimensions for each emission source considered in the analysis are provided in the modeling DVD (Appendix D). The model input stack parameters are summarized in Appendix B.

3.6 BUILDING WAKE (DOWNWASH) EFFECTS

The emissions sources at the Moss Lake Compressor Station were evaluated in terms of the equipment proximity to nearby structures. The purpose of this evaluation is to determine if stack discharges may become caught in the turbulent wakes generated by these structures. AERMOD incorporates the Plume Rise Model Enhancements (PRIME) algorithms for estimating enhanced plume growth and restricted plume rise for plumes affected by building wakes.[13]

Direction-specific structure dimensions and the dominant downwash structure parameters used as input to AERMOD were determined using the *BREEZE*® Building Profile Input Program – PRIME Model (BPIPPRM) software, developed by Trinity Consultants, Inc. The BREEZE software incorporates the algorithms of the U.S. EPA's sanctioned BPIP PRIME (BPIPPRM), version 04274.[14]

The output from the BPIPPRM downwash analysis lists the names and dimensions of the structures generating wake effects and the locations and heights of the affected emissions sources (*i.e.*, stacks). In addition, the output contains a summary of the dominant structure for each emissions source (considering all wind directions) and the actual structure height and projected widths for all wind directions. This information is provided in Appendix D.

3.7 RECEPTOR GRID

For the modeling analysis, CP Express used a Cartesian receptor grid to predict off-property, ground-level concentrations. Receptor spacing varies according to distance from the Moss Lake Compressor Station. CP Express placed receptors at 100-meter (m) intervals along the property boundary and any public roads which bisect the property. From the property line to 1,000 m (or 1 km), CP Express placed receptors every 100 m. From 1 km to 5 km from the property boundary, CP Express placed receptors every 500 m. From 5

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[12] EPA's *Technical Support Document for the Stack Height Regulations (Revised)* (1985).

[13] Lloyd L. Schulman, David G. Strimaitis & Joseph S. Scire (2000) Development and Evaluation of the PRIME Plume Rise and Building Downwash Model, Journal of the Air & Waste Management Association, 50:3, 378-390, DOI: 10.1080/10473289.2000.10464017.

[14] U.S. Environmental Protection Agency, *User's Guide to the Building Profile Input Program*, Research Triangle Park, NC, EPA-454/R-93-038.

km to 20 km from the property boundary, CP Express placed receptors every 1,000 m. In addition, from 20 km to 50 km from the property boundary, CP Express placed receptors every 5,000 m.

3.8 EMISSION RATES

For the Siginificance modeling, CP Express has modeled all the facility-wide emission sources for each pollutant that are above their respective PSD SER thresholds. The modeled emission rates for all the emission sources were based on their proposed, maximum emission rates as summarized in the Emissions Inventory Questionnaire (EIQ) in Section 4 of the Application. Annual emission limits (tons per year) for all emission sources were modeled for annual averaging periods and maximum hourly emissions were modeled for all short-term (24 hours or less) averaging periods. A summary of the modeled emission rates is provided in Appendix B.

For the NAAQS analysis, the modeled emission rates were the calculated annual PTE for the annual averaging period for each emission source. For the short-term averaging periods, the modeled emission rates were the hourly maximum PTE. Per U.S. EPA's March 1, 2011 modeling guidance memorandum[15] (2011 Modeling Clarification Memo) CP Express did not include intermittent sources, such as emergency generators and firewater pumps operating less than 100 hours per year in 1-hour NO_2 model.

For the PSD Increment analysis, the Moss Lake Compressor Station sources were conservatively modeled based on the PTE, similar to the NAAQS analysis. For the short-term averaging periods, the modeled emission rates were the hourly maximum PTE. For the annual averaging period, the modeled emission rates were the annual PTE (to be conservative).

3.9 SOURCE PARAMETERS

The stack parameters and the emission rates for the modeled sources are provided in Appendix B. For off-property sources with missing stack parameters, the following LDEQ's approved default pseudo-point source parameters were modeled:

- 0.001 m/s exit velocity;
- 1 m stack diameter;
- 1 m stack height; and
- 0 K stack temperature.

[15] U.S. Environmental Protection Agency Memorandum. "Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO_2 National Ambient Air Quality Standard". March 1, 2011. Available at: https://www.epa.gov/sites/production/files/2015-07/documents/appwno2_2.pdf. Accessed July 2022.

4. ADDITIONAL IMPACT ANALYSES

A PSD additional impacts analysis was conducted to assess the potential impacts of the Moss Lake Compressor Station on residential, industrial, and commercial growth, on local soils and vegetation, and on visibility impairment.

4.1 GROWTH ANALYSIS

The elements of the growth analysis include a projection of the associated industrial, commercial, and residential growth that will occur in the area of impact due to the proposed Moss Lake Compressor Station, including the potential impact on ambient air due to this growth. Refer to Section 5 (Environmental Assessment Statement) of the Application for additional information.

4.2 SOIL AND VEGETATION ANALYSIS

The U.S. EPA developed the secondary NAAQS in order to protect certain air quality-related values (*i.e.*, soil and vegetation) that were not sufficiently protected by the primary NAAQS. If design modeled concentrations are found to be less than the secondary NAAQS, it can be concluded that emissions from the project will not result in harmful effects to either soil or vegetation.[16] The impacts from the Moss Lake Compressor Station will be lower than all primary NAAQS (see Table 5-2), which are intended to protect human health and are more stringent than standards intended to protect soil or vegetation. Therefore, Moss Lake Compressor Station will not result in harmful effects on either soil or vegetation.

4.3 CLASS I AREA ANALYSIS

PSD Class I Increment standards may apply to facilities located within 100 km of a federal Class I area. The Moss Lake Compressor Station is located more than 100 km from the nearest Class I area, the Breton National Wildlife Refuge (NWR), which is approximately 435 km from the Moss Lake Compressor Station. Therefore, a Class I area impact analysis is not required.

4.4 NEAR-FIELD VISIBILITY ANALYSIS

Near-field visibility analyses are required for any sensitive receptors (state parks, local airports, etc.) that may be located within the proposed project's daily SIA. The analyses are generally conducted in the VISCREEN model, which can consist of two levels– Level 1, with very conservative default settings and Level 2, with more typical meteorological conditions. If predicted values from the VISCREEN model are greater than the standardized screening values using the Level 1 parameters, the next level analysis, Level 2 should be performed. CP Express determined that there were no sensitive receptors within this area. Therefore, a VISCREEN analysis was not performed.

[16] U.S. EPA, Office of Air Quality Planning and Standards, *New Source Review Workshop Manual*, Research Triangle Park, NC, October 1990.

5. MODELING RESULTS SUMMARY

The results of the modeling analysis performed are presented in this section. The building input parameters for the building downwash analysis are included in Appendix D. The stack parameters and the emission rates for the modeled sources are provided in Appendix B. The electronic modeling files are provided in Appendix D.

5.1 SIGNIFICANCE ANALYSIS

Significance Impact Analysis was performed for CO, NO_2, PM_{10}, and $PM_{2.5}$ averaging periods. This section presents the comparison of the Class II PSD SIL to the highest first high (H1H) concentration estimated through modeling. The results of the modeling analysis were compared with the applicable significance levels to determine whether additional modeling was necessary and were compared with applicable monitoring *de minimis* levels to determine whether pre-construction monitoring was necessary. The significance analysis for 1-hr and annual NO_2 averaging periods, and 24-hr $PM_{2.5}$ averaging period resulted in impacts greater than the significance level. Therefore, a full impacts analysis is required for these pollutants and averaging periods.

5.1.1 Significance Analysis Impacts

In this analysis, the criteria pollutant potential emissions of the proposed Moss Lake Compressor Station were modeled for comparison with their respective SILs, which are defined for different averaging periods, as well as the Monitoring *de minimis* concentration (as applicable). Table 5-1 below show the results from this analysis.

Table 5-1. Significance Analysis Results

Pollutant	Averaging Period	Modeled Concentration (µg/m³)	(SIL) (µg/m³)	Modeled Concentration < SIL (Yes/No)	Monitoring *de minimis* Concentration (µg/m³)	Modeled Concentration < Monitoring *de minimis* (Yes/No)	AOI[1] (km)
CO	1-hour	982.6	2,000	Yes	N/A	N/A	--
	8-hour	76.7	500	Yes	575	Yes	--
NO_2	1-hour	15.7	7.5	No	N/A	N/A	1.3
	Annual	1.02	1	No	14	Yes	0.2
PM_{10}	24-Hour	1.5	5	Yes	N/A	N/A	--
	Annual	0.1	1	Yes	10	Yes	--
$PM_{2.5}$[2]	24-Hour (NAAQS)	1.3	1.2	No	N/A	N/A	0.8
	24-Hour (Increment)	1.5	1.2	No	N/A	N/A	1.0
	Annual	0.1	0.2	Yes	N/A	N/A	--

[1] The following UTM facility center point was used: 459527.4 meters (Easting); 3328917.5 meters (Northing).

[2] For $PM_{2.5}$ 24-hour and Annual Models, Total Concentration = Primary $PM_{2.5}$ (Modeled Concentration) + Secondary $PM_{2.5}$ (MERP Analysis)

$PM_{2.5}$ 24-hour (NAAQS) Total Concentration (µg/m³) = 1.24 + 0.0499 = 1.3 µg/m³

$PM_{2.5}$ 24-hour (Increment) Total Concentration (µg/m³) = 1.41 + 0.0499 = 1.5 µg/m³

$PM_{2.5}$ Annual Total Concentration (µg/m³) = 0.11 + 0.0017 = 0.1 µg/m³

As shown in Table 5-1, the Monitoring *de minimis* concentrations were not exceeded by impacts from the proposed Moss Lake Compressor Station for 8-hr CO, annual NO_2 and annual PM_{10} averaging periods. Therefore, preconstruction monitoring is not required. For 1-hr and 8-hr CO, 24-hr and annual PM_{10}, and annual $PM_{2.5}$ averaging periods, the modeled impacts do not exceed the SILs. Therefore, the Moss Lake Compressor Station will not cause or significantly contribute to an exceedance of their respective NAAQS. Therefore, a full impact analysis is not required.

As shown in Table 5-1, the impacts from 1-hr and annual NO_2, and 24-hr $PM_{2.5}$ averaging periods exceeded their respective SILs. Therefore, a full impacts analysis was performed for these pollutants and averaging periods. Table 5-1 show the AOI (km) for these criteria pollutants and their respective averaging periods. CP Express obtained an off-property emissions inventory from the LDEQ based upon the AOI plus up to 15 km. Based on the recent LDEQ guidance, CP Express obtained an offsite emissions inventory for additional 5 km beyond the AOI+15 km (i.e. AOI + 20 km) to ensure all major sources are included.

5.2 NAAQS ANALYSIS

Based on the output from the significance analysis, the NAAQS analysis was performed for 1-hr and annual NO_2, and 24-hr $PM_{2.5}$ averaging periods. Table 5-2 summarizes the results of the NAAQS analysis.

Table 5-2. NAAQS Analysis Results

Pollutant	Averaging Period	Rank	Modeled Concentration (µg/m³)	Background Concentration (µg/m³)	Total Concentration (µg/m³)	NAAQS (µg/m³)	Total Concentration <NAAQS (Yes/No)
NO_2	1-hour	98th Percentile	199.7	62.7	262.4	188	No. Based on cause and contribute analysis, the project contribution is not significant.
	Annual	Mean	21.6	12.2	33.8	100	Yes
$PM_{2.5}$	24-hour	98th Percentile	27.2	17.3	44.5	35	No. Based on cause and contribute analysis, the project contribution is not significant.

Note - For $PM_{2.5}$ 24-hour Model, Total Concentration = Primary $PM_{2.5}$ (Modeled Concentration) + Secondary $PM_{2.5}$ (MERP Analysis) + Background Concentration

$PM_{2.5}$ 24-hour Total Concentration (µg/m³) = 27.10 + 0.0499 + 17.3 = 44.5 µg/m³

As shown in Table 5-2, Moss Lake Compressor Station demonstrates compliance with NAAQS thresholds for all pollutant-averaging period combinations except for 1-hr NO_2 and 24-hr $PM_{2.5}$. For the 1-hr NO_2 and 24-hr $PM_{2.5}$ 24-hr NAAQS, a cause-and-contribute analysis was performed to demonstrate the proposed Moss Lake Compressor Station does not cause any violation to the NAAQS. The MAXDCONT output was used to evaluate whether the proposed Moss Lake Compressor Station is significantly contributing to any of the exceedances. Accordingly, the receptors at which the modeled concentrations were exceeded for 1-hr NO_2 NAAQS of 188 µg/m³, the maximum Moss Lake Compressor Station contribution is 0.90 µg/m³, which is less than Class II PSD SIL of 7.5 µg/m³. Similarly, the receptors at which the modeled concentrations were exceeded for 24-hr $PM_{2.5}$ NAAQS of 35 µg/m³, the maximum Moss Lake Compressor Station contribution (primary + secondary) is 0.18 µg/m³, which is less than Class II PSD SIL of 1.2 µg/m³. Therefore, CP Express demonstrates that the proposed Moss Lake Compressor Station does not cause any violations of the 1-hr NO_2 and 24-hr $PM_{2.5}$ NAAQS, and is not deemed culpable. The corresponding NAAQS modeling files along with the 1-hr NO_2 and 24-hr $PM_{2.5}$ MAXDCONT (.mdc) files are provided in Appendix D.

5.3 PSD INCREMENT ANALYSIS

The PSD Increment Analysis for 24-hr $PM_{2.5}$ was conducted using the approach described in Section 2.5 with the emissions and stack parameter data for Moss Lake Compressor Station and off-property emissions sources provided in Appendix B and Appendix E, respectively. CP Express conservatively utilized the NAAQS results for the annual NO_2 averaging period to demonstrate compliance with the PSD Increment Standards.

This approach is conservative given that it does not take into account the increment expansion, which would only reduce concentrations.

5.3.1 PSD Increment Analysis Results

Table 5-3 lists the concentrations resulting from the PSD modeling analysis.

Table 5-3. PSD Increment Analysis Results

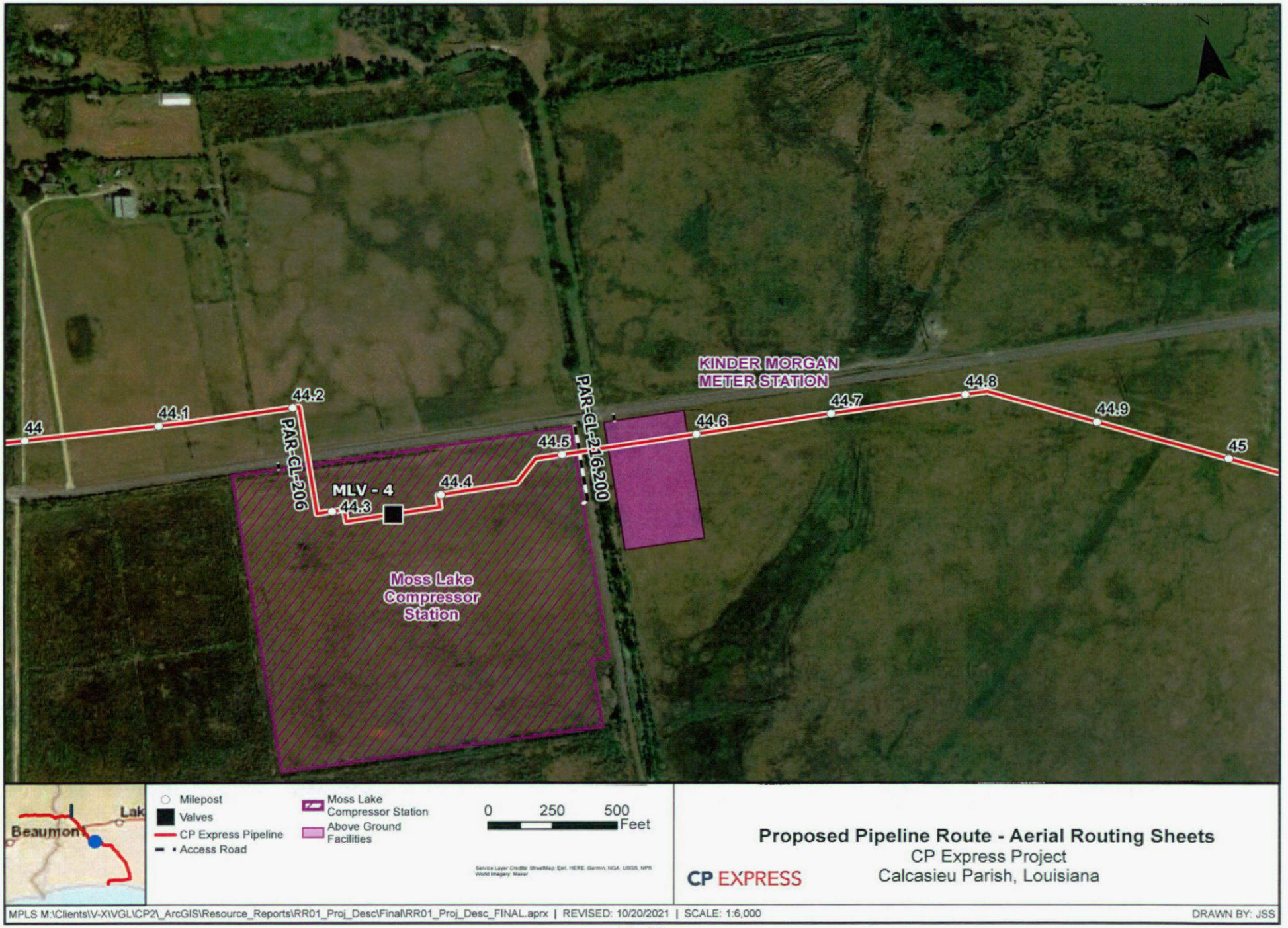
Pollutant	Averaging Period	Rank	Modeled Concentration (µg/m³)	PSD Increment (µg/m³)	Modeled Concentration < PSD Increment (Yes/No)
NO_2	Annual	Mean	21.6	25	Yes
$PM_{2.5}$	24-hour	2nd High	10.4	9	No. Based on cause and contribute analysis, the project contribution is not significant.

Note - For $PM_{2.5}$ 24-hour Model, Total Concentration = Primary $PM_{2.5}$ (Modeled Concentration) + Secondary $PM_{2.5}$ (MERP Analysis)

$PM_{2.5}$ 24-hour Total Concentration (µg/m³) = 10.32 + 0.0499 = 10.4 µg/m³

As shown above, CP Express demonstrates compliance with Increment threshold for NO_2 annual. Therefore, no further analysis is required for NO_2 Annual. For 24-hr $PM_{2.5}$, a cause-and-contribute analysis was performed to demonstrate the proposed Moss Lake Compressor Station does not cause any violation to the PSD Increment Standard. The MAXDCONT output was used to evaluate whether the proposed Moss Lake Compressor Station is significantly contributing to any of the exceedances. Accordingly, the receptors at which the modeled concentrations were exceeded for 24-hr $PM_{2.5}$ PSD Increment Standard of 9 µg/m³, the maximum Moss Lake Compressor Station contribution (primary + secondary) is 0.06 µg/m³, which is less than Class II PSD SIL of 1.2 µg/m³. Therefore, CP Express demonstrates that the proposed Moss Lake Compressor Station does not cause any violations of the 24-hr $PM_{2.5}$ PSD Increment threshold, and is not deemed culpable. The corresponding PSD Increment modeling files are provided in Appendix D.

APPENDIX A. AERIAL MAP


N
KINDER MORGAN
METER STATION
PAR-CL-216-200
PAR-CL-206
MLV - 4
44
44.1
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44.3
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44.5
44.6
44.7
44.8
44.9
45
Moss Lake
Compressor
Station
Beaumont
Lak
Milepost
Valves
CP Express Pipeline
Access Road
Moss Lake
Compressor Station
Above Ground
Facilities
0
250
500
Feet
Proposed Pipeline Route - Aerial Routing Sheets
CP Express Project
Calcasieu Parish, Louisiana
CP EXPRESS
MPLS M:\Clients\V-X\VGL\CP2_ArcGIS\Resource_Reports\RR01_Proj_Desc\Final\RR01_Proj_Desc_FINAL.aprx | REVISED: 10/20/2021 | SCALE: 1:6,000
DRAWN BY: JSS

APPENDIX B. MODELED STACK PARAMETERS AND EMISSION RATES

Table B-1. Moss Lake Compressor Station Source Emission Rates for Air Dispersion Modeling Analysis

Source ID	Operating Condition	Emission Type	Emission Rates (g/s)					
			NO_X		CO		$PM_{10}/PM_{2.5}$	
			1-hour [1]	Annual	1-hour	8-hour	24-hour	Annual
ACT1	Continuous	Routine	2.041E+00	1.840E+00	3.037E+00	3.037E+00	6.344E-01	5.771E-01
ACT2	Continuous	Routine	2.041E+00	1.840E+00	3.037E+00	3.037E+00	6.344E-01	5.771E-01
ACT3	Continuous	Routine	2.041E+00	1.840E+00	3.037E+00	3.037E+00	6.344E-01	5.771E-01
ACT4	Continuous	Routine	2.041E+00	1.840E+00	3.037E+00	3.037E+00	6.344E-01	5.771E-01
ACT5	Continuous	Routine	2.041E+00	1.840E+00	3.037E+00	3.037E+00	6.344E-01	5.771E-01
EGEN1	Intermittent	Periodic/Emergency	-	2.029E-02	9.722E-01	1.215E-01	6.342E-04	6.342E-04
EGEN2	Intermittent	Periodic/Emergency	-	2.029E-02	9.722E-01	1.215E-01	6.342E-04	6.342E-04
EGEN3	Intermittent	Periodic/Emergency	-	2.029E-02	9.722E-01	1.215E-01	6.342E-04	6.342E-04
EGEN4	Intermittent	Periodic/Emergency	-	2.029E-02	9.722E-01	1.215E-01	6.342E-04	6.342E-04
EGEN5	Intermittent	Periodic/Emergency	-	2.029E-02	9.722E-01	1.215E-01	6.342E-04	6.342E-04

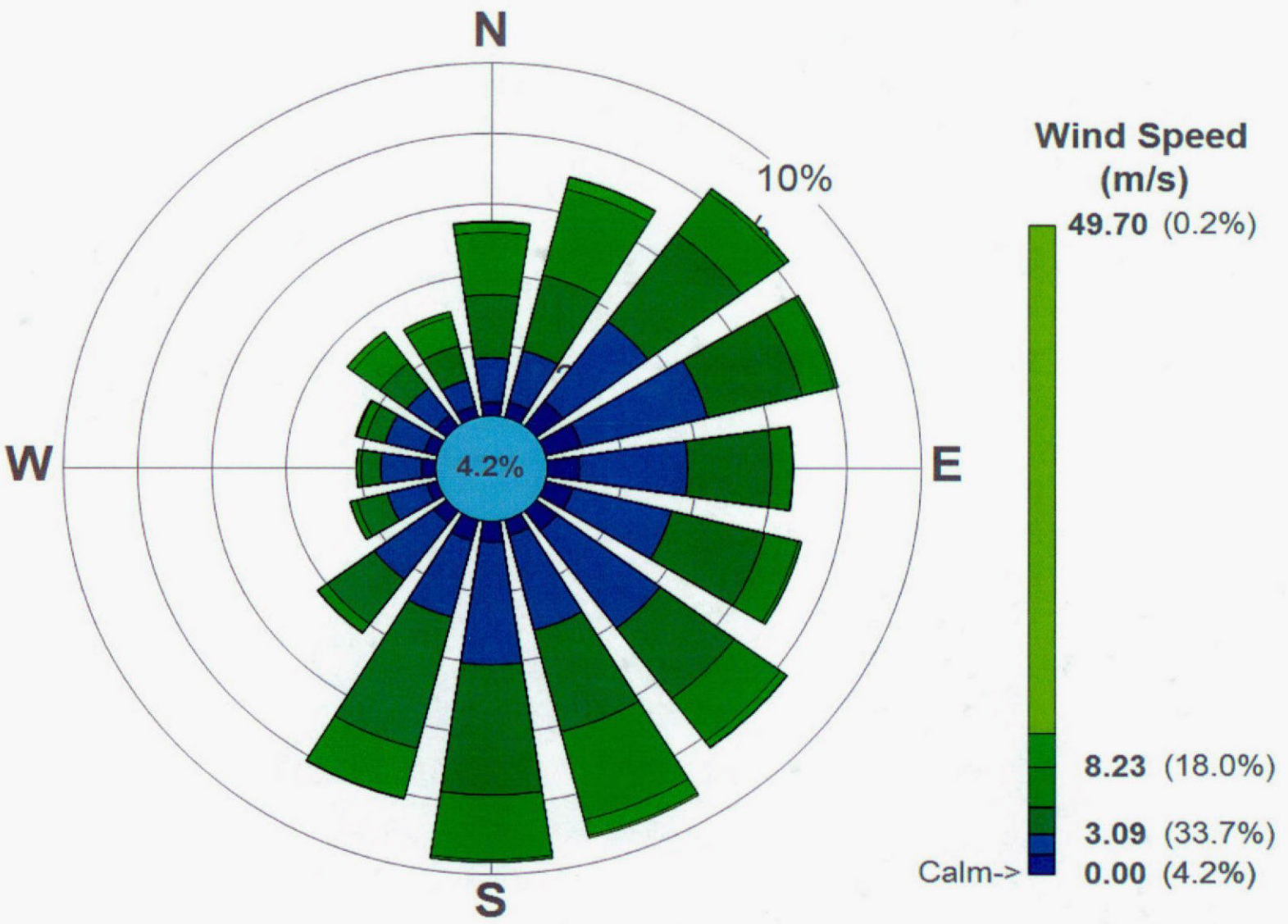
[1] Per U.S. EPA guidance, intermittent sources are not included in 1-hr NO_2 model.

Table B-2. Moss Lake Compressor Station Source Stack Parameters for Air Dispersion Modeling Analysis

Model Source Type	Height (m)	Temperature (K)	Velocity (m/s)	Diameter (m)
Aeroderivative Simple Cycle Combustion Turbines	24.384	804.317	24.156	3.048
Emergency Engines	3.962	757.205	31.061	0.305

APPENDIX C. WINDROSE DIAGRAM

Lake Charles Regional Airport Windrose Diagram - 2016-2019 and 2021 years



APPENDIX D. ELECTRONIC MODELING FILES

Attention EDMS User: Additional Content Available

There is an item associated with this facility or record which cannot be entered into the Electronic Document Management System (EDMS) because it is in a format which cannot be displayed. Below you will find a description of the item.

- *To request a copy of the item, please complete a Public Records Request form at www.deq.louisiana.gov/prr and include the submittal ID of the item in your request.*
- *DEQ employees may review the item by contacting the Public Records Center.*

For more information, please send email to publicrecords@la.gov.

Submittal ID: **10370010**

Details:

Title V Permit Initial and PSD Permit Initial (AI 232173) 7/29/2022 (1 CD)

APPENDIX E. OFFSITE EMISSIONS INVENTORY

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
742	0520-00081-11	EQT00000000060	L1	TDU TO-1	461179.915	3331852.423	5.922E-02	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000061	L2	TDU TO-2	461179.915	3331852.423	5.922E-02	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000062	L3	ORU TO-1	461179.915	3331852.423	5.922E-02	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000073	L4	TDU H-1	461179.915	3331852.423	4.738E-01	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000074	L5	TDU H-2	461179.915	3331852.423	4.738E-01	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	ARE00000000001	L6	BH-307	461091.760	3331905.039	3.515E-01	19.812		13.713		This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L7. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	ARE00000000001	L7	BH-307	461091.760	3331905.039	3.515E-01	19.812	294.261	13.713	1.000	-
742	0520-00081-11	ARE00000000002	L8	BH-308	461091.978	3331966.539	3.515E-01	19.812	294.261	12.162	1.000	-
742	0520-00081-11	ARE00000000002	L9	BH-308	461091.978	3331966.539	3.515E-01	19.812		12.162		This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L8. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	EQT00000000037	L10	EMER-GEN 1	461248.000	3332000.000	1.582E-01	6.096	533.150			This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L11. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	EQT00000000037	L11	EMER-GEN 1	461248.000	3332000.000	1.582E-01	3.048	800.150	101.471	0.152	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
742	0520-00081-11	EQT00000000038	L12	EMER-GEN 2	461248.000	3332000.000	1.582E-01	6.096	533.150			This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L13. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	EQT00000000038	L13	EMER-GEN 2	461248.000	3332000.000	1.582E-01	3.048	800.150	101.471	0.152	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
742	0520-00081-11	EQT00000000040	L14	DM-2	461027.000	3332266.000	3.668E-02	3.048	716.483	419.755	0.076	
742	0520-00081-11	EQT00000000039	L15	DM-1	461073.000	3332262.999	1.287E-01	3.048	716.483	148.724	0.128	
123032	0520-00328-03	EQT00000000016	L16	16-04-F	455303.286	3329864.685	1.172E-01	7.620	1088.706	224.311	0.122	-
123032	0520-00328-03	EQT00000000029	L17	33-16-ICE-ES	455303.286	3329864.685	8.064E-01	3.048	905.372	22.028	0.152	-
123032	0520-00328-03	EQT00000000030	L18	34-16-GR-BS	455303.286	3329864.685	7.560E-03	3.048	533.150	5.700	0.152	-
196950	0520-00490-00	EQT00000000001	L19	1-15-ICE-ES	455072.081	3332235.819	7.056E-02	3.810	555.372	12.924	0.152	-
90769	0520-00263-03	EQT00000000015	L20	19-12-ICE-ES	455139.698	3332398.661	4.914E-02	3.048	569.261	9.845	0.152	-
199894	0520-00505-00	EQT00000000001	L21	MVC-1	465543.123	3325616.364	1.828E+00	15.240	2199.817	18.288	3.353	-
216323	1340-00369-01	EQT00000000001	L22	MVC-1	465543.123	3325616.364	7.522E-01	15.240	1019.261	0.015	3.353	-
199894	0520-00505-00	EQT00000000003	L23	BL-1	465540.986	3325610.830	3.276E-01	8.534	519.261	10.058	0.762	-
216323	1340-00369-01	EQT00000000003	L24	BL-1	465540.986	3325610.830	2.722E-01	8.534	519.261	10.058	0.762	-
184675	0520-00472-00	EQT00000000003	L25	003	465862.442	3325671.441	5.695E-01	1.000	294.261	0.001	1.000	-
201334	0520-00504-V0	EQT00000000017	L26	P05TU01	466843.037	3329201.005	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000018	L27	P05TU02	466842.025	3329248.989	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000019	L28	P05TU03	466841.980	3329297.968	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000020	L29	P05TU04	466840.971	3329346.950	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000025	L30	P05TO01	466847.048	3329509.049	1.052E+00	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000042	L31	P05H01	466869.968	3329537.016	6.766E-03	30.480	566.483	7.620	1.036	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
201334	0520-00504-V0	EQT00000000013	L32	P04TU01	467005.022	3329202.956	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000014	L33	P04TU02	467004.013	3329252.049	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000015	L34	P04TU03	467003.000	3329300.033	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000016	L35	P04TU04	467001.991	3329349.015	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000024	L36	P04TO01	467007.968	3329511.004	1.052E+00	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000041	L37	P04H01	467032.048	3329539.964	6.766E-03	30.480	566.483	7.620	1.036	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
149553	0520-00386-01	EQT00000000001	L38	GDR-1	454303.086	3334447.180	2.520E-03	3.658	574.817	0.451	0.101	-
149553	0520-00386-01	EQT00000000018	L39	HT-1	454303.086	3334447.180	5.040E-03	3.658	574.817	0.195	0.152	-
149553	0520-00386-01	EQT00000000019	L40	LH-1	454303.086	3334447.180	1.260E-03	3.658	574.817	0.195	0.152	-
201334	0520-00504-V0	EQT00000000009	L41	P03TU01	467166.043	3329205.024	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000010	L42	P03TU02	467165.033	3329254.005	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000011	L43	P03TU03	467164.987	3329302.984	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000012	L44	P03TU04	467163.973	3329350.969	9.211E-01	46.330	647.039	30.480	3.109	-

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
201334	0520-00504-V0	EQT00000000023	L45	P03TO01	467170.045	3329512.957	1.052E+00	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000040	L46	P03H01	467192.968	3329542.032	6.766E-03	30.480	566.483	7.620	1.036	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
201334	0520-00504-V0	EQT00000000030	L47	GFLR2W	467224.966	3329059.020	7.853E+01	45.720	1273.150	20.001	16.785	-
201334	0520-00504-V0	EQT00000000028	L48	GFLR2D	467263.992	3329059.015	8.808E+01	45.720	1273.150	20.001	17.776	-
201334	0520-00504-V0	EQT00000000031	L49	DFLARE01	467286.997	3328920.986	2.772E-02	106.680	1273.150	20.001	0.314	-
201334	0520-00504-V0	EQT00000000033	L50	WFLARE01	467287.006	3328923.978	3.528E-02	106.680	1273.150	20.001	0.354	-
201334	0520-00504-V0	EQT00000000005	L51	P02TU01	467328.031	3329207.977	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000006	L52	P02TU02	467327.017	3329255.961	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000007	L53	P02TU03	467326.007	3329305.054	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000008	L54	P02TU04	467324.996	3329354.036	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000022	L55	P02TO01	467330.969	3329516.024	1.052E+00	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000039	L56	P02H01	467355.044	3329543.988	6.766E-03	30.480	566.483	7.620	1.036	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
201334	0520-00504-V0	EQT00000000034	L57	WFLARE02	467471.003	3328840.989	3.528E-02	106.680	1273.150	20.001	0.354	-
201334	0520-00504-V0	EQT00000000032	L58	DFLARE02	467471.958	3328837.994	2.772E-02	106.680	1273.150	20.001	0.314	-
201334	0520-00504-V0	EQT00000000001	L59	P01TU01	467488.956	3329210.049	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000002	L60	P01TU02	467488.041	3329259.031	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000003	L61	P01TU03	467487.990	3329307.012	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000004	L62	P01TU04	467486.978	3329355.994	9.211E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000029	L63	GFLR1W	467505.000	3329062.955	7.853E+01	45.720	1273.150	20.001	16.785	Based on current permit (EDMS Document ID: 11210918) SR No. 181, both wet gas ground flares (EQT0029 and EQT0030) can only be operated simultaneously 1) during commissioning or 2) if the total gas volume simultaneously flared through both wet gas ground flares doesn't exceed the maximum gas volume from one wet gas ground flare alone. Therefore, only modeled one dry gas ground flare (Model ID: L47) to avoid double-counting.
201334	0520-00504-V0	EQT00000000021	L64	P01TO01	467493.045	3329517.983	1.052E+00	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000038	L65	P01H01	467515.967	3329546.948	6.766E-03	30.480	566.483	7.620	1.036	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
201334	0520-00504-V0	EQT00000000027	L66	GFLR1D	467544.025	3329062.950	8.808E+01	45.720	1273.150	20.001	17.776	Based on current permit (EDMS Document ID: 11210918) SR No. 180, both dry gas ground flares (EQT0027 and EQT0028) can only be operated simultaneously 1) during commissioning or 2) if the total gas volume simultaneously flared through both dry gas ground flares doesn't exceed the maximum gas volume from one dry gas ground flare alone. Therefore, only modeled one dry gas ground flare (Model ID: L48) to avoid double-counting.
201334	0520-00504-V0	EQT00000000048	L67	SWP2P01	467571.964	3329649.948	2.900E-02	7.620	665.372	56.693	0.305	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
201334	0520-00504-V0	EQT00000000049	L68	SWP2P02	467578.998	3329650.038	2.900E-02	7.620	665.372	56.693	0.305	
201334	0520-00504-V0	EQT00000000050	L69	SWP2P03	467587.959	3329650.012	1.158E-03	7.620	665.372	56.693	0.229	
201334	0520-00504-V0	EQT00000000026	L70	CVTO	467691.967	3329433.956	3.207E+00	22.860	1255.372	15.850	2.286	-
201334	0520-00504-V0	EQT00000000053	L71	LNGBP2	467738.992	3329204.992	6.545E-04	7.620	665.372	56.693	0.229	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
201334	0520-00504-V0	EQT00000000052	L72	LNGBP1	467739.010	3329210.976	2.900E-02	7.620	665.372	56.693	0.305	
201334	0520-00504-V0	EQT00000000035	L73	MFLARE01	467786.005	3328871.976	7.530E+00	57.912	1273.150	20.001	5.200	-
201334	0520-00504-V0	EQT00000000045	L74	SWP1P01	467855.987	3328814.039	1.661E-03	7.620	665.372	56.693	0.305	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
201334	0520-00504-V0	EQT00000000046	L75	SWP1P02	467855.966	3328806.947	8.055E-04	7.620	665.372	56.693	0.229	
201334	0520-00504-V0	EQT00000000047	L76	SWP1P03	467855.966	3328806.947	8.055E-04	7.620	665.372	56.693	0.229	
205014	0520-00499-00	EQT00000000001	L77	2-16	468121.000	3330164.999	1.310E+00	9.144	388.706	28.285	15.316	-
205014	0520-00499-00	EQT00000000002	L78	3-16	468121.000	3330164.999	3.528E-02	2.713	477.594	8.839	3.658	-
99407	0560-00184-V10	EQT00000000096	L79	EU15J	467622.900	3325082.000	7.560E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000095	L80	EU15I	467624.200	3325016.000	7.560E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000094	L81	EU15H	467628.900	3324712.000	7.560E+00	45.720	809.261	43.891	4.572	-

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
99407	0560-00184-V10	EQT00000000081	L82	EU13C	467808.800	3325051.000	2.157E+00	64.922	1088.706	12.878	3.886	-
99407	0560-00184-V10	EQT00000000082	L83	EU13D	467808.800	3325051.000	2.157E+00	64.922	1088.706	12.878	3.886	-
99407	0560-00184-V10	EQT00000000093	L84	EU15G	467615.400	3324641.000	7.560E+00	45.720	809.261	43.891	4.572	-
99407	0560-00184-V10	EQT00000000073	L85	EU15F	467635.400	3324347.000	7.560E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000072	L86	EU15E	467622.000	3324271.000	7.560E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000079	L87	EU20	467911.900	3324747.000	7.799E-01	13.716	1273.150	19.995	0.329	-
99407	0560-00184-V10	EQT00000000084	L88	SSM	467911.900	3324747.000	7.580E+00	13.716	1273.150	19.995	0.329	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
99407	0560-00184-V10	EQT00000000071	L89	EU15D	467636.800	3323973.000	7.560E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000083	L93	EU20A	467390.700	3323569.000	9.232E+00	57.912	1273.150	0.091	0.823	-
142099	0520-00376-02	EQT00000000001	L90	2-06-GR-BS	450019.590	3329216.316	2.520E-03	4.572	533.150	2.286	0.152	-
142099	0520-00376-02	EQT00000000009	L91	6-06-F	450019.590	3329216.316	4.536E-02	7.620	1088.706	130.150	0.091	-
142099	0520-00376-02	EQT00000000017	L92	18-13-ICE-ES	450019.590	3329216.316	2.444E-01	3.048	810.928	7.925	0.152	-
99407	0560-00184-V10	EQT00000000070	L94	EU15C	467628.500	3323901.000	7.560E+00	45.720	809.261	43.891	4.572	-
134011	0520-00498-00	EQT00000000001	L95	001	464945.278	3336794.326	9.450E-02	1.000	0.000	0.001	1.000	-
134011	0520-00498-00	EQT00000000002	L96	002	464945.278	3336794.326	3.906E-01	1.000	0.000	0.001	1.000	-
81859	0520-00219-V6	EQT00000000004	L97	3-99	466600.157	3335399.908	8.946E-02	7.010	651.483	138.379	0.152	-
99407	0560-00184-V10	EQT00000000001	L98	EU01A	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	Consistent with the air dispersion modeling analysis performed for this facility, the vaporization sources were excluded from the off-property inventory. Refer to April 2013 air dispersion modeling report (pg 16/105) (EDMS Document ID: 8785365).
99407	0560-00184-V10	EQT00000000002	L99	EU01B	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000003	L100	EU01C	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000004	L101	EU01D	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000005	L102	EU01E	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000006	L103	EU01F	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000007	L104	EU01G	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000008	L105	EU01H	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000009	L106	EU01I	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000010	L107	EU01J	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000016	L108	EU03A	467247.295	3323081.245	4.032E-02	34.686	394.261	0.030	0.381	-
99407	0560-00184-V10	EQT00000000021	L109	EU03B	467247.295	3323081.245	4.032E-02	34.686	394.261	0.030	0.381	-
99407	0560-00184-V10	EQT00000000069	L110	EU15B	467648.600	3323602.999	7.560E+00	45.720	809.261	43.891	4.572	-
99407	0560-00184-V10	EQT00000000068	L111	EU15A	467649.800	3323536.999	7.560E+00	45.720	809.261	43.891	4.572	-
81859	0520-00219-V6	SCN00000000001	L112	1-99SU/SD	466600.817	3335680.373	6.605E+01	1.000	0.000	0.001	1.000	It is an alternate operating scenario of EQT00000000002. The emissions from EQT00000000002 are modeled under Model ID: L114. Therefore, this source was excluded.
81859	0520-00219-V6	SCN00000000002	L113	2-99SU/SD	466600.817	3335680.373	6.605E+01	1.000	0.000	0.001	1.000	It is an alternate operating scenario of EQT00000000003. The emissions from EQT00000000003 are modeled under Model ID: L115. Therefore, this source was excluded.
81859	0520-00219-V6	EQT00000000002	L114	1-99	466601.009	3335680.261	6.605E+01	21.336	879.261	23.622	7.567	The stack diameter is calculated based on the permitted flow rate and stack velocity.
81859	0520-00219-V6	EQT00000000003	L115	2-99	466601.009	3335680.261	6.605E+01	21.336	879.261	36.363	6.095	The stack diameter is calculated based on the permitted flow rate and stack velocity.
145324	0560-00253-02	EQT00000000008	L116	GE-01	451585.657	3323182.284	6.300E-01	7.620	810.928	76.880	0.152	-
145324	0560-00253-02	EQT00000000009	L117	GE-02	451585.657	3323182.284	6.300E-01	7.620	810.928	76.880	0.152	-
145324	0560-00253-02	EQT00000000010	L118	GR-01	451585.657	3323182.284	8.820E-03	7.620	449.817	1.747	0.305	-
145324	0560-00253-02	EQT00000000015	L119	PE-01	451585.657	3323182.284	5.834E-01	7.620	755.372	66.318	0.152	-
145324	0560-00253-02	EQT00000000016	L120	PE-02	451585.657	3323182.284	5.834E-01	7.620	755.372	66.318	0.152	-
145324	0560-00253-02	EQT00000000034	L121	CE-02	451585.657	3323182.284	6.930E-01	6.096	727.594	67.147	0.253	-
99407	0560-00184-V10	EQT00000000056	L122	EU13A	467835.000	3323584.000	2.157E+00	64.922	1088.706	12.878	3.886	-
99407	0560-00184-V10	EQT00000000057	L123	EU13B	467835.000	3323584.000	2.157E+00	64.922	1088.706	12.878	3.886	-
154027	0520-00403-02	EQT00000000001	L124	FL-01	465202.167	3337000.951	1.260E-03	33.528	1273.150	0.198	0.509	-
154027	0520-00403-02	EQT00000000002	L125	HT-01	465202.167	3337000.951	5.935E-01	12.247	423.150	26.591	0.978	-
154027	0520-00403-02	SCN00000000001	L126	0	465197.432	3337026.231	6.041E-01	1.000	0.000	0.001	1.000	-
154027	0520-00403-02	SCN00000000002	L127	0	465197.432	3337026.231	6.032E-01	1.000	0.000	0.001	1.000	-
7935	0560-00005-12	EQT00000000010	L128	GR-BS-1	459196.960	3318891.035	2.520E-03	3.658	533.150	2.286	0.152	-
7935	0560-00005-12	EQT00000000015	L129	HAC-PU-2	459196.960	3318891.035	2.167E-01	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000016	L130	HAC-PU-5	459196.960	3318891.035	2.167E-01	6.096	810.928	27.950	0.076	-

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
7935	0560-00005-12	EQT00000000017	L131	HAC-PU-3	459196.960	3318891.035	2.167E-01	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000019	L132	HAC-PU-6	459196.960	3318891.035	2.167E-01	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000020	L133	HAC-PU-1	459196.960	3318891.035	2.167E-01	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000022	L134	HAC-PU-8	459196.960	3318891.035	2.167E-01	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000062	L135	HAC-TP-1	459196.960	3318891.035	1.701E-01	3.048	810.928	31.699	0.076	-
7935	0560-00005-12	EQT00000000064	L136	HAC-INJ-1	459196.960	3318891.035	3.868E-01	3.048	810.928	49.682	0.076	-
7935	0560-00005-12	EQT00000000095	L137	HAC-COMP-2A	459196.960	3318891.035	7.434E-01	3.048	848.150	18.258	0.152	-
99407	0560-00184-V10	EQT00000000017	L138	EU04	467626.700	3322830.060	9.267E+00	57.912	0.000	0.091	0.823	-
172983	0520-00438-02	ARE000000000008	L141	1b	463967.371	3338097.664	5.698E+00	9.144	293.150	0.001	1.000	-
17904	0520-00156-V4	EQT00000000008	L139	1-07	467752.205	3334958.867	9.337E-01	9.144	422.039	1.524	0.792	-
1251	0520-00001-V20	EQT00000000026	L140	10-96	467095.030	3335773.959	3.024E-02	32.004	392.039	84.978	0.204	-
7935	0560-00005-12	EQT00000000023	L143	HAC-PU-4	459200.000	3318700.000	2.167E-01	6.096	810.928	27.950	0.076	-
1251	0520-00001-V20	RLP000000000004	L142	11-96	467108.967	3335796.966	3.150E+00	60.960	534.817	30.267	1.219	-
30168	0520-00194-07	EQT00000000001	L144	F-1	466537.753	3336411.929	3.654E-02	76.200	810.928	18.288	0.610	-
30168	0520-00194-07	EQT00000000003	L145	H-1	466537.753	3336411.929	1.512E+00	51.511	477.594	0.001	1.000	-
1251	0520-00001-V20	EQT00000000178	L146	12-15	467093.000	3335897.000	3.024E-02	32.004	392.039	85.009	0.204	-
1251	0520-00001-V20	EQT00000000177	L147	11-15	467094.000	3335903.000	1.413E+01	60.960	534.817	30.267	1.219	-
1251	0520-00001-V20	RLP00000000142	L148	8-15	467084.000	3335923.000	1.152E-03	40.234	810.928	7.925	0.914	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
1251	0520-00001-V20	EQT00000000142	L149	1-07	467165.000	3335842.000	4.536E-01	33.528	394.261	25.176	0.914	-
1251	0520-00001-V20	EQT00000000091	L150	5-91	467061.000	3335960.999	2.936E-01	32.004	330.372	20.208	1.006	-
1251	0520-00001-V20	EQT00000000152	L151	3-12	467218.000	3335808.000	4.536E-01	33.528	394.261	25.176	0.914	-
1251	0520-00001-V20	EQT00000000055	L152	28-90	467111.000	3335927.000	9.299E-01	39.624	344.817	11.034	2.920	-
3439	0520-00048-V7	EQT00000000023	L153	8-12	467684.355	3335269.563	5.544E-02	3.048	449.817	3.432	0.305	-
3439	N/A	EQT00000000031	L154	SNED-K1	467684.355	3335269.563	4.435E-02	1.000	0.000	0.001	1.000	-
1251	0520-00001-V20	EQT00000000057	L155	3-01	467129.000	3335961.000	6.590E-01	60.655	345.928	16.124	1.372	-
3439	0520-00048-V7	RLP00000000006	L156	4-87	467738.093	3335269.405	5.216E+01	60.960	1366.483	17.904	5.182	-
3439	0520-00048-V7	RLP00000000037	L157	1-09	467764.957	3335300.465	5.216E+01	60.655	374.817	28.042	2.438	-
1251	0520-00001-V20	EQT00000000111	L158	8-90	467079.078	3336138.691	2.887E-03	15.545	418.706	20.117	0.914	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
37103	0560-00096-09	EQT00000000039	L159	PE-04	467295.526	3321918.256	2.558E-01	2.438	672.039	8.809	0.076	-
37103	0560-00096-09	EQT00000000040	L160	HT-02	467295.526	3321918.256	5.040E-03	7.620	449.817	0.073	0.204	-
37103	0560-00096-09	EQT00000000043	L161	CE-09	467295.526	3321918.256	3.473E-01	2.134	727.594	11.613	0.253	-
1251	0520-00001-V20	EQT00000000027	L162	11-01	467118.517	3336124.167	3.141E-03	35.662	1088.706	6.462	0.762	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
1251	0520-00001-V20	EQT00000000072	L163	4-78	467138.023	3336110.036	5.834E-03	26.518	449.817	20.117	0.914	
1251	0520-00001-V20	EQT00000000121	L164	1-06	467129.000	3336120.000	4.892E-03	15.240	1088.706	3.901	1.524	
1251	0520-00001-V20	EQT00000000025	L165	10-01	467142.562	3336114.122	9.611E-03	44.501	1088.706	3.231	0.914	
1251	0520-00001-V20	EQT00000000044	L166	2-91	467132.010	3336128.005	4.914E-01	26.518	347.039	25.268	0.914	-
1251	0520-00001-V20	EQT00000000122	L167	2-06	467209.980	3336084.998	4.465E-03	22.860	1088.706	7.132	1.524	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
1251	0520-00001-V20	EQT00000000105	L168	7-73	467186.895	3336126.179	5.137E+00	60.655	560.928	11.918	1.524	-
1251	0520-00001-V20	EQT00000000021	L169	1-93	467208.000	3336130.999	3.982E-01	26.518	347.039	27.737	0.914	-
1251	0520-00001-V20	EQT00000000192	L170	1-19	467268.800	3336143.443	8.329E-01	12.192	435.928	16.459	1.524	-
1251	0520-00001-V20	EQT00000000193	L171	1-21	467268.800	3336143.443	9.349E-01	30.480	427.039	14.051	1.067	-
37103	0560-00096-09	EQT00000000004	L172	16-98-HT-BS	467100.000	3321500.000	5.040E-03	7.620	449.817	0.073	0.204	-
37103	0560-00096-09	EQT00000000023	L173	PE-03	467100.000	3321500.000	8.316E-02	2.438	672.039	8.809	0.076	-
37103	0560-00096-09	EQT00000000031	L174	GR-01	467100.000	3321500.000	1.008E-02	6.096	449.817	1.524	0.152	-
37103	0560-00096-09	EQT00000000033	L175	HT-01	467100.000	3321500.000	5.040E-03	7.620	449.817	0.073	0.204	-
37103	0560-00096-09	EQT00000000036	L176	CE-06	467100.000	3321500.000	2.621E-01	2.134	727.594	11.613	0.253	-
37103	0560-00096-09	EQT00000000037	L177	CE-07	467100.000	3321500.000	4.612E-01	2.134	727.594	11.613	0.253	-
43304	0520-00206-08	EQT00000000023	L178	BO-101	466948.496	3336553.855	1.651E-01	6.096	505.372	8.534	0.610	-
3585	0520-00050-V18	EQT00000000017	L179	H-103	469128.782	3333568.542	1.575E-01	4.572	497.039	13.411	0.610	-
3585	0520-00050-V18	EQT00000000020	L180	H-205	469128.841	3333589.596	1.134E-01	26.975	560.928	6.309	0.610	-
3585	0520-00050-V18	EQT00000000021	L181	H-501	469128.841	3333589.596	7.332E+00	53.340	533.150	7.620	2.438	-

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3585	0520-00050-V18	EQT00000000051	L182	H-701	469128.841	3333589.596	9.034E-01	30.480	667.594	3.048	1.524	-
3585	0520-00050-V18	EQT00000000018	L183	H-201	469126.961	3333606.223	4.448E-01	20.117	389.817	5.480	1.585	-
3585	0520-00050-V18	EQT00000000019	L184	H-204	469127.054	3333639.467	1.663E+00	41.758	527.594	3.200	1.585	-
3585	0520-00050-V18	EQT00000000015	L185	F-400	469141.953	3333800.102	9.271E+00	30.480	1255.372	0.061	0.396	-
43304	0520-00206-08	EQT00000000001	L186	BO-100	466967.856	3336747.719	8.316E-02	6.096	505.372	8.534	0.610	-
27518	2461-V7	EQT00000000003	L187	02-96	465676.120	3337928.073	7.445E+00	38.100	1144.261	4.322	0.558	-
27518	2461-V7	EQT00000000002	L188	01-96	465676.068	3338003.869	7.418E+00	30.480	1144.261	11.046	0.357	-
6164	0520-00145-V16	EQT00000000035	L189	30-94	465729.312	3338096.454	6.678E-01	9.144	422.039	19.995	0.792	-
3585	0520-00050-V18	CON00000000003	L190	MVCU	469552.928	3333725.155	3.440E-01	15.240	810.928	10.668	2.591	-
3585	0520-00050-V18	EQT00000000061	L191	Bz-ThOx	469552.928	3333725.155	3.654E-02	7.620	1088.706	11.162	0.305	-
3585	0520-00050-V18	EQT00000000063	L192	H-501A	469552.928	3333725.155	1.792E+00	52.426	627.594	10.506	1.777	-
3585	0520-00050-V18	EQT00000000064	L193	H-901	469552.928	3333725.155	8.341E-01	48.463	610.928	9.367	1.372	-
8372	0520-00088-06	EQT00000000023	L194	TKCLEAN	467901.781	3336346.356	2.633E-01	1.000	0.000	0.001	1.000	-
176987	0520-00445-00	EQT00000000001	L195	3-11-GR-BS	455207.860	3339284.276	6.300E-03	3.048	533.150	5.791	0.152	-
176987	0520-00445-00	EQT00000000004	L196	6-11-ICE-ES	455207.860	3339284.276	5.090E-01	3.048	810.928	16.429	0.152	-
176987	0520-00445-00	EQT00000000015	L197	12-11-F	455207.860	3339284.276	3.654E-02	4.572	1088.706	207.874	0.061	-
18070	0520-00146-V6	EQT00000000006	L198	1-97	465635.880	3338356.100	2.177E+00	22.860	438.706	6.340	1.676	-
18070	0520-00146-V6	EQT00000000005	L199	3-90	465644.870	3338359.000	1.998E+00	22.860	429.261	16.642	1.448	-
6164	0520-00145-V16	EQT00000000053	L201	WPT35-98	465347.685	3338594.095	1.462E-01	7.620	324.817	0.305	1.524	-
6164	0520-00145-V16	EQT00000000043	L202	WPT6-96	465210.285	3338680.964	2.335E+00	30.480	441.483	19.873	1.402	-
6164	0520-00145-V16	EQT00000000044	L204	WPT7-96	465210.302	3338686.505	2.335E+00	30.480	441.483	19.873	1.402	-
18070	0520-00146-V6	EQT00000000004	L203	2-90	465594.400	3338454.300	7.837E-01	39.014	435.928	3.932	1.905	-
18070	0520-00146-V6	EQT00000000003	L205	1-90	465590.200	3338459.000	3.465E-01	41.148	430.372	4.450	1.219	-
6164	0520-00145-V16	EQT00000000042	L206	WPT5-96	465204.557	3338696.496	4.909E+00	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000001	L200	F-101	470570.964	3331437.222	2.084E+00	55.001	441.483	19.154	4.877	-
6164	0520-00145-V16	EQT00000000040	L209	WPT3-96	465204.687	3338737.497	4.909E+00	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000009	L207	F-341A	470573.430	3331566.533	4.964E-01	55.001	571.483	37.402	1.999	-
18070	0520-00146-V6	EQT00000000015	L211	17-90	465528.190	3338566.200	9.261E-01	60.655	0.000	0.001	0.610	-
6164	0520-00145-V16	EQT00000000038	L212	WPT1-96	465203.855	3338778.501	4.909E+00	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000010	L208	F-341B	470597.514	3331566.469	4.964E-01	55.001	571.483	37.402	1.999	-
188813	0520-00476-V1	EQT00000000036	L210	F-103	470614.294	3331536.837	5.456E-01	64.999	433.150	5.483	3.840	-
188813	0520-00476-V1	EQT00000000035	L213	F-102	470689.787	3331523.449	1.193E+00	64.999	441.483	37.234	3.499	-
188813	0520-00476-V1	EQT00000000037	L214	F-342	470682.102	3331567.794	7.182E-01	64.999	571.483	12.213	3.499	-
188813	0520-00476-V1	EQT00000000038	L215	F-343A	470677.643	3331593.625	6.804E-02	55.001	405.372	23.037	2.499	-
6164	0520-00145-V16	EQT00000000041	L216	WPT4-96	465184.017	3338898.242	4.909E+00	43.282	474.817	11.278	2.134	-
118397	0520-00313-02	EQT00000000022	L217	ENG-2	454169.000	3339085.999	1.890E-01	2.743	810.928	0.055	0.101	-
6164	0520-00145-V16	EQT00000000039	L218	WPT2-96	465204.361	3338938.070	4.909E+00	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000037	L219	9-01	465694.562	3338683.872	4.297E-01	13.716	929.817	36.576	2.438	-
118397	0520-00313-02	EQT00000000008	L220	HEATER-2	454164.445	3339165.471	2.520E-03	3.048	0.000	0.001	0.152	-
118397	0520-00313-02	EQT00000000012	L221	ENG-1	454164.445	3339165.471	2.444E-01	2.438	1005.372	41.395	0.076	-
17269	0520-00179-02	EQT00000000039	L222	EP-6-95-01	467200.000	3337600.000	6.174E-02	10.912	552.594	0.091	0.549	-
6164	0520-00145-V16	EQT00000000030	L223	10-89	465625.560	3338784.928	3.717E+01	60.655	324.817	0.305	0.914	-
6164	0520-00145-V16	EQT00000000105	L226	WPT1-10	465417.984	3338966.095	2.924E+00	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000110	L227	1-13	465417.984	3338966.095	3.804E+00	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000111	L228	WPT1-13	465417.984	3338966.095	8.342E+00	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000112	L229	WPT1-14	465417.984	3338966.095	7.141E-02	1.000	0.000	0.001	1.000	It is an intermittent source. Per March 1, 2011 1-hr NO_2
6164	0520-00145-V16	EQT00000000117	L230	1-18	465417.984	3338966.095	7.539E-03	12.192	0.000	0.001	2.286	modeling memo, the emissions were normalized.
6164	0520-00145-V16	EQT00000000128	L231	2-20	465417.984	3338966.095	6.665E-01	1.000	0.000	0.001	1.000	-
6164	0520-00145-V16	EQT00000000129	L232	3-20	465417.984	3338966.095	3.377E-01	1.000	0.000	0.001	1.000	-
6164	0520-00145-V16	EQT00000000131	L233	4-20	465417.984	3338966.095	3.377E-01	1.000	0.000	0.001	1.000	-
6164	Regper - Boiler	EQT00000000133	L234	WPT1-21	465417.984	3338966.095	3.276E-01	1.000	0.000	0.001	1.000	-
6164	0520-00145-V16	EQT00000000048	L235	WPT11-96	465730.481	3338779.059	3.717E+01	91.440	1255.372	19.995	1.067	-
682	0520-00119-V7	EQT00000000020	L224	MDPE #1	467327.010	3337582.949	1.260E-03	1.000	0.000	0.001	1.000	-
682	0520-00119-V7	EQT00000000021	L225	MDPE #2	467327.010	3337582.949	1.260E-03	1.000	0.000	0.001	1.000	-
6164	0520-00145-V16	EQT00000000017	L236	31-85	465761.362	3338802.234	3.994E+00	30.480	477.594	18.288	1.402	-
6164	0520-00145-V16	EQT00000000036	L240	1-95	465739.343	3338842.195	4.939E+00	43.282	474.817	11.278	2.134	-

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
6164	0520-00145-V16	EQT00000000023	L241	1-89F	465766.324	3338849.868	5.363E+00	43.586	388.706	14.630	1.524	-
188813	0520-00476-V1	EQT00000000012	L237	F-461	470921.531	3331725.065	1.764E-02	64.999	1273.150	1.859	0.213	-
188813	0520-00476-V1	EQT00000000039	L238	F-462	470921.531	3331725.065	1.260E-02	64.999	1273.150	1.859	0.213	-
188813	0520-00476-V1	EQT00000000040	L239	F-463	470921.531	3331725.065	1.512E-02	64.999	1273.150	1.859	0.213	-
185639	0520-00481-V0	EQT00000000028	L242	RH-1001	471258.590	3330498.990	3.276E-02	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000001	L243	GT-1301A	471264.700	3330518.580	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000002	L244	GT-1301B	471264.220	3330550.640	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000013	L245	H-1603	471280.050	3330449.269	3.667E-01	54.864	422.039	20.361	1.219	-
6164	0520-00145-V16	EQT00000000024	L247	2-89	465761.974	3338998.371	2.797E+00	30.480	422.039	18.288	1.402	-
185639	0520-00481-V0	EQT00000000009	L246	B-1101	471296.120	3330589.510	7.182E-02	15.240	394.261	9.653	0.914	-
6164	0520-00145-V16	EQT00000000022	L248	1-89E	465766.912	3339038.249	5.363E+00	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000021	L252	1-89D	465766.974	3339058.195	5.363E+00	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000020	L254	1-89C	465767.005	3339068.168	5.363E+00	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000019	L255	1-89B	465767.036	3339078.141	5.363E+00	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000018	L256	1-89A	465767.071	3339089.222	5.363E+00	43.586	388.706	14.630	1.524	-
185639	0520-00481-V0	EQT00000000029	L249	RH-2001	471358.290	3330500.380	3.276E-02	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000003	L250	GT-2301A	471364.640	3330520.200	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000004	L251	GT-2301B	471364.080	3330552.169	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000014	L253	H-2603	471379.500	3330450.970	3.667E-01	54.864	422.039	20.361	1.219	-
185639	0520-00481-V0	EQT00000000010	L257	B-2101	471396.280	3330591.590	7.182E-02	15.240	394.261	9.653	0.914	-
31843	0560-00149-02	EQT00000000001	L261	01-97-HT-BS	458948.719	3316922.399	5.292E-03	7.620	449.817	1.320	0.253	-
31843	0560-00149-02	EQT00000000002	L262	10-97-ICE-ES	458948.719	3316922.399	1.671E-01	3.048	699.817	13.564	0.101	-
31843	0560-00149-02	EQT00000000003	L263	21-97-ICE-ES	458948.719	3316922.399	1.114E-01	3.048	699.817	8.992	0.101	-
31843	0560-00149-02	EQT00000000013	L264	PE-01	458948.719	3316922.399	6.401E-02	2.134	699.817	5.090	0.076	-
185639	0520-00481-V0	EQT00000000030	L258	RH-3001	471458.250	3330502.190	3.276E-02	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000006	L259	GT-3301B	471463.800	3330553.800	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000015	L260	H-3603	471479.580	3330452.459	3.667E-01	54.864	422.039	20.361	1.219	-
185639	0520-00481-V0	EQT00000000011	L265	B-3101	471495.730	3330592.980	7.182E-02	15.240	394.261	9.653	0.914	-
185639	0520-00481-V0	EQT00000000031	L266	RH-4001	471557.950	3330503.660	3.276E-02	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000007	L267	GT-4301A	471564.220	3330523.460	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000008	L268	GT-4301B	471563.650	3330555.340	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000016	L269	H-4603	471579.470	3330454.200	3.667E-01	54.864	422.039	20.361	1.219	-
133	0520-00011-V7	EQT00000000088	L270	6-16	471438.000	3331348.000	6.516E-02	2.591	885.372	23.284	0.101	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
133	0520-00011-V7	EQT00000000086	L271	6-14	471449.000	3331406.000	1.784E-02	10.769	888.150	45.406	0.052	
185639	0520-00481-V0	EQT00000000012	L272	B-4101	471596.120	3330594.370	7.182E-02	15.240	394.261	9.653	0.914	-
133	0520-00011-V7	EQT00000000087	L273	6-15	471393.000	3331700.000	5.329E-02	3.048	873.150	59.506	0.152	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
133	0520-00011-V7	EQT00000000018	L274	2-02	471452.319	3331455.733	1.466E+01	53.035	1366.483	19.812	4.267	-
133	0520-00011-V7	EQT00000000051	L275	5-01	471522.749	3331495.442	3.276E+00	38.252	337.039	9.754	2.438	-
133	0520-00011-V7	EQT00000000022	L276	3-07	471582.821	3331254.826	3.238E-01	9.144	366.483	20.117	1.372	-
1250	2920-V4	EQT00000000242	L280	3(XXX)2	468162.045	3337666.043	2.016E+00	64.618	477.594	12.427	2.210	-
133	0520-00011-V7	EQT00000000090	L277	5-01b	471527.000	3331603.000	3.276E+00	38.252	311.483	16.764	2.134	-
34017	1260-00118-V2	EQT00000000003	L278	FU-01	471764.615	3330241.099	1.436E-01	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	FUG00000000010	L279	5-13	471571.827	3331474.261	2.016E-02	1.000	0.000	0.001	1.000	-
185639	0520-00481-V0	EQT00000000005	L281	GT-3301A	471764.510	3330521.910	2.399E+00	64.922	458.150	26.021	2.743	-
133	0520-00011-V7	EQT00000000030	L282	4-02	471674.044	3331138.239	1.802E-01	27.432	394.261	23.439	0.792	-
37119	2338-V4	EQT00000000011	L286	PG-1-94	466839.934	3338867.958	5.040E-03	10.668	0.000	0.001	0.152	-
133	0520-00011-V7	EQT00000000050	L283	4-24	471661.107	3331352.138	1.625E-01	9.144	588.706	10.363	0.457	-
133	0520-00011-V7	EQT00000000092	L284	4-22	471661.107	3331352.138	5.544E-02	9.144	588.706	10.363	0.457	-
133	0520-00011-V7	EQT00000000093	L285	4-23	471661.107	3331352.138	5.544E-02	9.144	588.706	10.363	0.457	-

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	3010-V6	EQT00000000352	L287	3(XXIX)3	466425.104	3339281.999	3.365E+01	91.440	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
212290	0520-00509-V0	EQT00000000010	L288	3101B	471816.759	3331339.438	8.820E-02	60.960	1273.150	20.117	0.113	-
1250	PSD-LA-545(M-1)	EQT00000000293	L289	3(XX-B)1	468355.700	3337942.515	9.878E-01	45.720	922.039	21.196	1.753	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L290. Therefore, this source was excluded from this modeling analysis.
1250	2796-V14	EQT00000000066	L291	3(IX)38	468512.000	3337851.999	5.695E-01	15.240	1273.150	20.001	1.430	-
212290	0520-00509-V0	EQT00000000031	L292	C702JB	471824.844	3332126.179	7.106E-01	64.999	688.706	18.136	3.706	-
3351	0520-00098-V9	EQT00000000020	L293	E-21	472030.000	3331228.000	4.410E-02	6.096	394.261	6.096	0.396	-
212290	0520-00509-V0	EQT00000000030	L294	C702JA	471823.859	3332155.436	7.106E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000025	L295	C701JB	471824.873	3332213.055	7.043E-01	64.999	466.483	28.834	3.048	-
212290	0520-00509-V0	EQT00000000024	L296	C701JA	471826.001	3332239.537	7.043E-01	64.999	466.483	28.834	3.048	-
3351	0520-00098-V9	EQT00000000042	L297	VSH-1	472000.000	3331537.000	3.780E-02	10.058	422.039	13.801	0.253	-
3351	0520-00098-V9	EQT00000000013	L298	E-14	472046.000	3331333.000	6.174E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000014	L299	E-15	472046.000	3331333.000	6.174E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000015	L300	E-16	472046.000	3331333.000	6.174E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000016	L301	E-17	472046.000	3331336.000	6.552E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000017	L302	E-18	472046.000	3331339.000	6.552E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000018	L303	E-19	472046.000	3331341.999	6.552E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000019	L304	E-20	472046.000	3331345.000	6.552E-01	13.106	288.706	8.230	0.762	-
1250	3010-V6	EQT00000000538	L306	PCD	466995.531	3339257.773	1.512E+00	1.000	0.000	0.001	1.000	Based on the Title V Permit Modification submitted to LDEQ on July 18, 2019. The portable thermal oxidizer/vapor combustor (PTO/VC) is only used during turnaround or other maintenance activities. The PTO/VC will be brought onsite on an as-needed basis. Therefore, this source was excluded.
1250	3010-V6	EQT00000000539	L307	PF	466995.531	3339257.773	3.367E+01	1.000	0.000	0.001	1.000	Based on the Title V Permit Modification submitted to LDEQ on July 18, 2019. The portable flare is only used during turnaround or other maintenance activities when one or more flares are down. Therefore, this source was excluded.
204624	7777-00902-ACI-00	EQT00000000001	L305	ACI	471876.712	3332180.012	1.934E+00	1.000	0.000	0.001	1.000	-
1250	PSD-LA-545(M-1)	EQT00000000293	L290	3(XX-B)1	468356.000	3338155.000	9.878E-01	45.720	922.039	21.196	1.753	-
1250	2920-V4	EQT00000000241	L308	3(XXVIII)1	468233.045	3338277.968	7.827E+00	45.720	435.928	9.616	2.438	-
1250	PSD-LA-545(M-1)	EQT00000000295	L309	3(VIII-A)2	468375.060	3338145.690	2.835E-01	9.144	477.594	5.066	0.762	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L310. Therefore, this source was excluded from this modeling analysis.
1250	PSD-LA-545(M-1)	EQT00000000294	L311	3(VIII-A)3	468380.373	3338151.770	3.087E-01	9.144	588.706	10.775	0.610	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L312. Therefore, this source was excluded from this modeling analysis.
1250	PSD-LA-545(M-1)	EQT00000000295	L310	3(VIII-A)2	468374.000	3338165.000	2.835E-01	9.144	477.594	5.066	0.762	-
3351	0520-00098-V9	EQT00000000004	L313	E-3	472200.000	3330900.000	6.187E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000005	L314	E-4	472200.000	3330900.000	6.187E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000006	L315	E-5	472200.000	3330900.000	6.187E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000007	L316	E-6	472200.000	3330900.000	6.187E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000008	L317	E-7	472200.000	3330900.000	6.187E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000009	L318	E-8	472200.000	3330900.000	6.187E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000010	L319	E-9	472200.000	3330900.000	6.187E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000011	L320	E-10	472200.000	3330900.000	4.410E-02	6.096	394.261	6.096	0.396	-
3351	0520-00098-V9	EQT00000000012	L321	E-11	472200.000	3330900.000	4.410E-02	6.096	394.261	6.096	0.396	-
3351	0520-00098-V9	EQT00000000023	L322	E-1	472200.000	3330900.000	1.025E-01	15.240	741.483	18.288	2.896	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3351	0520-00098-V9	EQT00000000024	L323	E-22	472200.000	3330900.000	7.787E-01	51.816	450.928	6.096	2.438	-
3351	0520-00098-V9	EQT00000000025	L324	E-23	472200.000	3330900.000	7.787E-01	51.816	450.928	6.096	2.438	-
212290	0520-00509-V0	EQT00000000029	L325	B702JB	471987.553	3332127.647	7.106E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000028	L326	B702JA	471986.571	3332158.123	7.106E-01	64.999	688.706	18.136	3.706	-
1250	PSD-LA-545(M-1)	EQT00000000294	L312	3(VIII-A)3	468398.000	3338250.999	3.087E-01	9.144	588.706	10.775	0.610	-
87773	0520-00247-03	EQT00000000024	L327	20-16	472060.579	3331902.514	7.560E-03	3.658	699.817	0.113	0.253	-
87773	0520-00247-03	EQT00000000025	L328	20-19	472060.579	3331902.514	7.560E-03	3.658	699.817	0.113	0.253	-
87773	0520-00247-03	EQT00000000028	L329	20-38	472060.579	3331902.514	3.465E-01	1.000	859.261	0.001	1.000	-
165504	0520-00420-01	EQT00000000004	L330	2009-04	472063.277	3331902.507	1.827E-01	3.048	477.594	3.533	0.204	-
165504	0520-00420-01	EQT00000000006	L331	2009-06	472063.277	3331902.507	4.624E-01	3.048	783.150	14.326	0.101	-
165504	0520-00420-01	EQT00000000007	L332	2009-07	472063.277	3331902.507	1.512E-02	3.048	477.594	3.533	0.204	-
165504	0520-00420-01	EQT00000000009	L333	2018-10	472063.277	3331902.507	1.827E-01	9.144	1273.150	0.001	0.076	-
212290	0520-00509-V0	EQT00000000023	L334	B701JB	471987.581	3332214.413	7.043E-01	64.999	466.483	28.834	3.048	-
212290	0520-00509-V0	EQT00000000022	L335	B701JA	471989.482	3332241.889	7.043E-01	64.999	466.483	28.834	3.048	-
1250	2930-V7	EQT00000000240	L336	3(XXVI)2	468189.967	3338562.993	4.497E+00	48.768	422.039	7.437	2.286	-
1250	3010-V6	EQT00000000357	L337	3(MISC)GEN	468399.959	3338400.045	2.559E+00	3.658	800.928		0.101	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L338. Therefore, this source was excluded from this modeling analysis.
1250	3010-V6	EQT00000000357	L338	3(MISC)GEN	468399.959	3338400.045	2.559E+00	3.048	298.150	187.686	0.091	The stack velocity is calculated based on the stack flow and stack diameter obtained from 3010-V6 permit.
1250	3010-V6	EQT00000000412	L339	3(MISC)GEN EMERG	468399.959	3338400.045	1.848E+00	3.658	800.928	187.686	0.101	
1250	2930-V7	EQT00000000239	L344	3(XXVI)1	468189.990	3338637.016	4.497E+00	45.720	422.039	7.437	2.286	-
212290	0520-00509-V0	EQT00000000027	L340	A702JB	472154.003	3332122.571	7.106E-01	64.999	688.706	18.136	3.706	-
1250	2930-V7	EQT00000000540	L346	RNTL-BLR-1	468519.970	3338349.945	1.436E+00	10.973	516.483	12.192	1.219	-
1250	2930-V7	EQT00000000541	L347	RNTL-BLR-2	468519.970	3338349.945	1.436E+00	10.973	516.483	12.192	1.219	-
212290	0520-00509-V0	EQT00000000026	L341	A702JA	472154.078	3332152.157	7.106E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000009	L342	7106B	472079.454	3332469.046	5.063E+00	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000021	L343	A701JB	472154.999	3332211.550	7.043E-01	64.999	466.483	28.834	3.048	-
1250	2920-V4	EQT00000000237	L348	3(XXII)1	468507.957	3338390.980	5.937E+00	60.960	433.150	13.274	2.134	-
212290	0520-00509-V0	EQT00000000020	L345	A701JA	472155.068	3332238.699	7.043E-01	64.999	466.483	28.834	3.048	-
1250	2920-V4	EQT00000000238	L349	3(XXII)2	468499.987	3338432.004	1.047E+01	76.200	416.483	12.713	4.014	-
1250	2920-V4	RLP00000000017	L350	3(XXII)3	468485.020	3338449.999	1.525E-01	41.148	699.817	15.993	0.204	-
1250	2935-V11	EQT00000000525	L351	B101	468615.811	3338365.295	1.273E-01	15.240	1255.372	0.001	1.219	-
1250	2796-V14	EQT00000000534	L352	B-103	469126.956	3337852.998	3.672E+00	15.240	1088.706	4.319	2.743	The stack velocity is calculated based on the stack flow and stack diameter obtained from 2796-V14 permit.
1250	2796-V14	EQT00000000063	L353	3(IX)34	469141.000	3337856.000	6.184E+00	22.860	1273.150	20.001	1.606	-
1250	2920-V4	EQT00000000230	L354	3(XVIII-A)3	468520.018	3338500.983	1.038E+00	29.962	695.372	6.971	1.728	-
1250	3010-V6	EQT00000000351	L355	3(XXIII)2	468163.099	3338825.919	3.365E+01	67.056	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
1250	2920-V4	EQT00000000232	L356	3(XVIII-A)2	468520.041	3338508.961	1.062E+00	29.962	672.039	6.907	1.728	-
1250	2920-V4	EQT00000000234	L357	3(XVIII)2	468512.983	3338532.031	1.649E+00	27.889	658.706	9.104	1.295	-
104574	0520-00304-02	EQT00000000001	L360	2-02-GR-BS	451839.733	3339606.280	2.520E-03	3.048	533.150	2.286	0.152	-
104574	0520-00304-02	EQT00000000003	L361	4-02-F	451839.733	3339606.280	1.764E-02	4.572	1088.706	1.829	0.610	-
104574	0520-00304-02	EQT00000000019	L362	24-14-ICE-ES	451839.733	3339606.280	5.090E-01	3.048	810.928	16.429	0.152	-
1250	2920-V4	EQT00000000227	L358	3(X-A)1	468443.027	3338612.017	4.322E-01	19.202	816.483	7.687	1.067	-
1250	2920-V4	EQT00000000236	L359	3(XXVII-A)1	468489.983	3338568.997	1.865E-01	30.480	588.706	9.050	0.686	-
1250	2920-V4	EQT00000000228	L363	3(X-A)2	468442.957	3338620.993	6.300E-01	19.202	744.261	10.510	1.067	-
1250	2920-V4	EQT00000000231	L364	3(XVIII-A)4	468620.031	3338494.048	9.693E+00	52.852	616.483	6.203	4.191	-
1250	2920-V4	EQT00000000229	L365	3(XVIII-A)1	468619.997	3338515.989	1.124E+00	30.876	692.594	7.501	1.728	-
1250	2920-V4	EQT00000000225	L367	3(X)4	468517.047	3338639.951	1.409E+00	32.309	624.817	8.099	1.676	-
1250	2920-V4	EQT00000000233	L368	3(XVIII)1	468624.042	3338549.997	1.886E+00	27.889	741.483	7.239	1.448	-
145324	N/A	EQT00000000035	L366	CE-03	470321.903	3321226.118	4.666E-01	1.000	0.000	0.001	1.000	-
1250	2920-V4	EQT00000000235	L374	3(XVIII)3	468623.980	3338561.965	8.127E-01	28.164	644.261	11.019	1.015	-

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	2920-V4	RLP00000000016	L375	3(XVIII-A)5	468473.956	3338720.968	7.976E-01	12.192	310.928	20.665	0.152	-
212290	0520-00509-V0	EQT00000000005	L369	7105B	472322.141	3332482.062	3.301E-01	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000007	L370	7102B	472322.145	3332483.614	3.780E-03	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000008	L371	7103B	472322.148	3332484.833	3.780E-03	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000006	L372	7101B	472323.490	3332482.059	3.780E-03	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000004	L373	7104B	472324.834	3332480.504	3.780E-03	106.070	1273.150	20.117	0.113	-
1244	0520-00007-V9	EQT00000000054	L377	B-100	467950.838	3339196.763	9.689E-01	15.240	422.039	28.392	1.372	-
1244	0520-00007-V9	EQT00000000058	L378	PE-10	467950.838	3339196.763	9.702E-02	1.713	858.150	39.377	0.101	-
1244	0520-00007-V9	EQT00000000064	L379	RTO	467950.838	3339196.763	1.392E+00	19.507	463.706	498.653	3.658	-
1244	Regper-Eng	EQT00000000066	L380	Eng	467950.838	3339196.763	8.342E-03	1.000	0.000	0.001	1.000	-
1250	2920-V4	EQT00000000226	L376	3(X)5	468617.012	3338616.948	9.878E-01	25.908	544.261	5.172	1.728	-
1250	2930-V7	EQT00000000396	L381	3(XXXIII)1A	469041.019	3338209.947	9.450E-01	53.340	505.372	2.195	2.109	-
1250	2920-V4	EQT00000000224	L386	3(X)6	468632.992	3338650.035	7.990E+00	28.346	477.594	13.378	1.881	-
212290	0520-00509-V0	EQT00000000018	L382	6301C	472392.371	3332407.642	2.633E-01	45.720	560.928	6.096	2.134	-
85234	0520-00232-03	EQT00000000001	L383	Comp-1	472770.767	3330582.965	9.374E-01	7.620	719.817	188.933	0.305	-
85234	0520-00232-03	EQT00000000002	L384	Comp-2	472770.767	3330582.965	9.374E-01	7.620	719.817	188.933	0.305	-
85234	0520-00232-03	EQT00000000003	L385	Comp-3	472770.767	3330582.965	9.374E-01	7.620	719.817	188.933	0.305	-
1250	2920-V4	EQT00000000223	L390	3(X)1	468622.029	3338687.965	4.813E-01	24.384	644.261	9.284	0.914	-
1250	3010-V6	EQT00000000350	L392	3(XXII)4	468405.069	3338904.007	3.365E+01	65.532	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
212290	0520-00509-V0	EQT00000000002	L387	B201B	472433.730	3332382.606	4.082E-01	30.480	1088.706	13.411	1.737	-
212290	0520-00509-V0	EQT00000000001	L388	A201B	472438.366	3332387.248	4.082E-01	30.480	1088.706	13.411	1.737	-
212290	0520-00509-V0	EQT00000000003	L389	C201B	472448.188	3332385.672	4.082E-01	30.480	1088.706	13.411	1.737	-
1250	3009-V6	EQT00000000502	L393	GA112A/B	467481.496	3339676.857	3.906E-01	1.000	0.000	0.001	1.000	-
212290	0520-00509-V0	SCN00000000001	L391	7106B	472751.818	3331023.597	9.543E+01	106.070	1273.150	20.117	16.871	Based on the Title V Permit No. 0520-00509-V0, it is an alternate operating scenario of EQT00000000009. The emissions from EQT00000000009 are modeled under Model ID: L342. Therefore, this source was excluded.
1250	2920-V4	RLP00000000015	L394	3(X)7	468518.008	3338873.985	7.976E-01	12.192	310.928	20.665	0.152	-
1250	3010-V6	EQT00000000521	L395	343B105	468675.890	3338804.164	3.367E+01	67.056	1273.150	20.117	10.996	Per LDEQ modeling guidance, the effective stack diameter of the flare is calculated based on heat input of 3,930 MMBTU/hr obtained from 3010-V6 permit.
1250	3010-V6	EQT00000000522	L396	343B107	468683.977	3338804.141	3.367E+01	91.440	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
1250	3010-V6	EQT00000000343	L397	3(IV)1	469139.021	3338377.109	3.365E+01	64.313	1273.150	20.117	3.505	
1250	2796-V14	EQT00000000064	L398	3(IX)35	469216.000	3338344.000	1.306E+01	30.480	1273.150	20.001	2.737	-
1250	2930-V7	EQT00000000397	L399	3(XXXIII)1B	469416.991	3338210.001	9.450E-01	53.340	505.372	2.347	2.109	-
3766	0520-00057-V5AA	EQT00000000007	L400	LR-01VCU	468471.530	3339149.821	4.511E-01	13.716	1271.483	18.440	2.438	-
1250	2930-V7	EQT00000000398	L401	3(XXXIII)2A	469453.005	3338212.006	1.418E+00	48.768	422.039	7.437	2.286	-
1250	2930-V7	EQT00000000399	L402	3(IIIXXX)2B	469453.968	3338212.003	1.418E+00	53.340	505.372	5.730	2.539	-
1250	2930-V7	EQT00000000256	L403	3(VII-C)2	469085.034	3338591.019	8.751E+00	36.576	727.594	3.353	2.134	-
1250	2930-V7	EQT00000000252	L404	3(III)1	469114.990	3338562.012	4.193E+00	47.244	672.039	2.926	2.134	-
1250	2930-V7	EQT00000000255	L405	3(VII-C)1	469114.990	3338562.012	7.367E+00	30.480	810.928	2.896	2.438	-
1250	2930-V7	EQT00000000253	L406	3(III)2	469114.993	3338563.010	4.193E+00	46.482	627.594	2.926	2.134	-
1250	2908-V10	EQT00000000034	L407	3(XVI)4	468595.894	3339076.106	4.511E-01	27.432	637.594	3.767	1.448	-
1250	2908-V10	EQT00000000033	L408	3(XVI)3	468594.852	3339081.982	3.112E-01	33.757	555.928	3.770	1.219	-
1250	2930-V7	EQT00000000257	L409	3(XIII)1	469088.028	3338663.039	7.377E+00	60.960	435.928	6.767	1.676	-
1250	2930-V7	EQT00000000251	L410	3(I-D)3	469087.972	3338677.001	8.094E+00	60.960	644.261	6.523	1.676	-
1250	2930-V7	EQT00000000249	L411	3(I-D)1	469070.996	3338699.987	6.917E+00	30.480	810.928	5.944	1.676	-

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AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	2930-V7	EQT00000000268	L412	3(K-6)5	469249.017	3338531.051	1.854E+01	28.194	477.594	4.724	2.896	-
1250	2930-V7	EQT00000000266	L413	3(K-6)3	469209.972	3338581.027	9.261E+00	38.100	494.261	24.140	2.362	-
1250	2930-V7	EQT00000000516	L414	B1E	469209.972	3338581.027	3.465E+00	19.812	422.039	16.947	2.134	-
1250	2930-V7	EQT00000000250	L415	3(I-D)2	469088.042	3338702.045	1.075E+00	21.336	688.706	2.134	1.829	-
1250	2930-V7	EQT00000000267	L416	3(K-6)4	469249.007	3338561.968	2.006E+01	28.194	477.594	4.724	2.896	-
1250	2930-V7	EQT00000000265	L417	3(K-6)2	469235.955	3338576.965	1.458E+01	22.647	513.706	13.076	2.438	-
1250	2908-V10	EQT00000000028	L418	3(II)7	468721.059	3339080.070	6.349E+00	34.747	655.372	11.342	2.134	-
1250	2930-V7	EQT00000000264	L419	3(K-6)1	469261.975	3338585.978	5.175E+01	24.536	463.706	12.405	2.743	-
1244	0520-00007-V9	EQT00000000052	L421	B-900	468101.317	3339629.604	9.803E-01	15.240	422.039	28.651	1.372	-
1244	0520-00007-V9	EQT00000000009	L422	96-02d	468100.933	3339630.048	8.077E-01	15.240	409.817	0.238	0.762	-
1250	2908-V10	EQT00000000027	L420	3(II)4	468744.077	3339083.108	1.991E-01	16.764	520.372	5.002	0.838	-
1250	2908-V10	EQT00000000038	L423	3(II)16	468735.090	3339104.963	5.440E+01	70.104	342.039	12.424	2.438	-
1250	2930-V7	EQT00000000272	L424	3(K-6)9	469269.000	3338621.000	8.127E+00	30.480	422.039	14.508	2.362	-
1250	2908-V10	EQT00000000030	L426	3(II)8	468824.070	3339080.110	1.239E+00	34.747	688.150	6.203	2.134	-
1250	2930-V7	EQT00000000271	L425	3(K-6)8	469269.010	3338656.990	4.308E+00	30.480	422.039	14.057	1.917	-
1250	2930-V7	EQT00000000247	L427	3(I)5	469134.986	3338791.006	1.326E+01	30.480	435.928	12.527	2.210	-
1250	2930-V7	EQT00000000248	L428	3(I)6	469118.998	3338822.965	1.406E+01	30.480	435.928	20.086	2.210	-
1250	2908-V10	EQT00000000039	L429	3(II)17	468823.082	3339105.045	5.440E+01	70.104	342.039	12.424	2.438	-
1250	2908-V10	EQT00000000029	L430	3(II)5	468836.165	3339101.573	1.424E-01	16.764	555.372	7.373	0.838	-
1244	0520-00007-V9	EQT00000000011	L431	96-03a	468036.481	3339811.305	2.946E+00	46.634	810.928	0.975	0.457	-
1250	2908-V10	EQT00000000032	L432	3(II)9	468914.951	3339080.184	6.349E+00	34.747	649.261	11.232	2.134	-
1250	2908-V10	EQT00000000031	L433	3(II)6	468921.984	3339081.937	1.991E-01	16.764	479.817	4.615	0.838	-
1250	2908-V10	EQT00000000040	L434	3(II)18	468912.134	3339105.125	5.440E+01	70.104	342.039	12.424	2.438	-
1244	0520-00007-V9	EQT00000000012	L435	96-03b	468016.332	3339867.324	2.946E+00	24.384	810.928	9.022	0.152	-
1250	2930-V7	EQT00000000508	L436	B1D	469283.002	3338805.994	3.465E+00	19.812	422.039	16.947	2.134	-
15430	0560-00160-01	EQT00000000001	L438	1-99	462882.744	3315400.259	4.119E-01	1.000	773.150	0.001	1.000	Based on EDMS Document ID: 10354366 (pg 6/33), it is an intermittent source which operates only a few days in a week. Therefore, the emissions were normalized based on operating hours of 1,378 hrs/yr.
15430	0560-00160-01	EQT00000000002	L439	2-99	462882.744	3315400.259	3.049E-01	1.829	844.261	48.768	0.076	-
5337	0520-00107-V6	EQT00000000018	L437	018	468430.199	3339641.174	2.268E-01	4.877	1273.150	19.995	0.457	-
5337	0520-00107-V6	EQT00000000010	L440	002	468205.363	3339855.471	3.125E-01	30.480	395.372	15.423	1.676	-
1250	2908-V10	EQT00000000322	L441	3(XXXIV)7-103	468957.905	3339221.903	2.520E-01	54.864	588.706	6.407	1.332	-
5337	0520-00107-V6	EQT00000000009	L442	009	468444.914	3339669.722	1.260E-01	4.572	1273.150	19.995	0.457	-
1250	2908-V10	EQT00000000321	L443	3(XXXIV)7-102	468957.939	3339233.982	4.133E-01	54.864	588.706	8.516	1.408	-
1250	2908-V10	EQT00000000320	L444	3(XXXIV)7-101	468957.979	3339248.055	4.133E-01	54.864	588.706	14.042	1.152	-
1250	2930-V7	EQT00000000254	L445	3(VII)1	469685.027	3338555.990	8.303E-01	35.204	577.594	2.438	1.707	-
1250	3010-V6	EQT00000000353	L446	3(XXXIV)10	468966.929	3339281.052	3.365E+01	60.960	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
42895	0520-00170-V5	EQT00000000003	L447	3	468801.730	3339484.641	3.065E+00	42.672	1273.000	20.000	0.762	LDEQ default flare stack temperature and stack velocity were utilized. The Startup, shutdown and Malfunction emissions were normalized based on operating hours obtained from EDMS Document IDs: 10481441 & 10890109.
1250	2908-V10	EQT00000000325	L448	3(XXXIV)7-203	468958.078	3339385.130	2.520E-01	54.864	588.706	6.407	1.332	-
42895	0520-00170-V5	EQT00000000001	L449	1	468820.100	3339512.292	7.304E+00	42.672	402.594	16.459	2.743	-
1250	2908-V10	EQT00000000324	L450	3(XXXIV)7-202	468957.823	3339397.099	4.133E-01	54.864	588.706	8.516	1.408	-
1250	2908-V10	EQT00000000323	L451	3(XXXIV)7-201	468957.859	3339410.064	4.133E-01	54.864	588.706	14.042	1.152	-
1250	2908-V10	EQT00000000036	L454	3(XXIX)2	468918.008	3339479.435	6.489E-01	37.795	577.594	4.459	1.829	-
1250	2908-V10	EQT00000000035	L455	3(XXIX)1	468932.930	3339479.614	1.149E+00	37.795	577.594	6.514	2.286	-
160280	0520-00412-03	ARE00000000006	L452	6-08	473559.496	3330760.112	5.040E-03	3.048	0.000	0.001	1.000	-
160280	0520-00412-03	EQT00000000002	L453	7-08	473559.496	3330760.112	1.487E-01	3.048	0.000	0.001	1.000	-

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AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
5337	0520-00107-V6	EQT00000000047	L456	002MSS	468206.255	3340163.197	1.071E-01	30.480	395.372	15.423	1.676	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
5337	0520-00107-V6	EQT00000000011	L457	003	468206.261	3340165.081	3.125E-01	30.480	395.372	15.423	1.676	-
5337	0520-00107-V6	EQT00000000048	L458	003MSS	468206.261	3340165.081	1.071E-01	30.480	395.372	15.423	1.676	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
5337	0520-00107-V6	EQT00000000016	L459	016	468231.961	3340164.674	2.885E-01	33.528	410.928	17.843	1.423	-
5337	0520-00107-V6	EQT00000000049	L460	016MSS	468231.961	3340164.674	9.889E-02	33.528	410.928	17.843	1.423	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
5337	0520-00107-V6	EQT00000000005	L461	005	468152.612	3340287.131	9.576E-02	20.351	435.928	2.926	0.954	-
5337	0520-00107-V6	EQT00000000001	L462	001	468205.468	3340256.836	1.295E+00	86.868	373.150	14.076	3.962	-
5337	0520-00107-V6	EQT00000000035	L463	001SU	468205.468	3340256.836	2.983E-01	64.999	373.150	14.076	3.962	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
5337	0520-00107-V6	EQT00000000015	L464	015	468204.977	3340286.979	1.134E+00	63.703	408.150	11.918	1.372	-
1250	3010-V6	EQT00000000354	L465	2(202)25	468163.903	3340496.092	3.365E+01	61.570	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
5337	0520-00107-V6	EQT00000000008	L466	008	468099.398	3340657.624	1.232E+00	81.077	1273.150	19.995	1.097	-
5337	0520-00107-V6	EQT00000000046	L467	008SU	468080.211	3340679.842	3.367E+01	81.077	1273.150	19.995	1.097	-
9061	0520-00127-V6	EQT00000000008	L468	88	468129.500	3340677.900	1.029E+00	60.960	0.000	0.001	0.610	-
1250	2796-V14	EQT00000000007	L469	3(XXX)1	469953.000	3339145.000	7.905E+00	15.240	1088.706	5.457	2.438	The stack velocity is calculated based on the stack flow and stack diameter obtained from 2796-V14 permit.
1253	0520-00006-V13	RLP00000000113	L470	1-18	469085.971	3340050.977	4.410E-02	9.144	622.039	11.500	0.457	-
9061	0520-00127-V6	EQT00000000016	L471	1-94A	468577.000	3340474.500	6.842E-01	15.240	427.594	18.014	0.838	-
9061	0520-00127-V6	EQT00000000017	L472	1-94B	468577.000	3340478.900	1.212E+00	15.240	427.594	18.014	0.838	-
9061	0520-00127-V6	EQT00000000102	L473	1-14	468579.600	3340539.599	3.024E-02	9.144	422.039	15.139	0.680	-
1253	0520-00006-V13	EQT00000000365	L474	WE-1	468699.985	3340500.089	1.247E-01	2.438	366.483	2.012	0.152	-
1253	0520-00006-V13	EQT00000000366	L475	WE-2	468699.985	3340500.089	1.840E-01	2.438	366.483	2.957	0.152	-
1253	0520-00006-V13	EQT00000000138	L476	Z1	469304.820	3340203.506	5.821E-01	45.720	1273.000	20.000	1.433	LDEQ default flare stack temperature and stack velocity were utilized. The effective stack diameter and emission rate was obtained from October 2015 modeling report Appendix C (page 37/42) of EDMS Document ID 9956540.
1253	0520-00006-V13	EQT00000000371	L477	2-18	469023.971	3340525.986	5.065E-01	6.401	549.817	8.068	1.000	-
1253	0520-00006-V13	EQT00000000372	L478	1-19	469028.011	3340558.997	5.065E-01	6.401	549.817	8.068	1.000	-
196978	0520-00492-V1	EQT00000000001	L479	001	470244.890	3339464.410	1.271E+01	91.440	0.000	96.622	1.067	-
196978	0520-00492-V1	EQT00000000002	L480	002	470246.400	3339464.439	5.040E-03	91.440	0.000	51.206	0.457	-
1253	0520-00006-V13	EQT00000000325	L481	5-08	468999.804	3340625.786	3.465E-01	12.192	491.483	17.605	0.863	-
1253	0520-00006-V13	EQT00000000322	L483	2-08	469014.820	3340625.744	1.848E+00	12.192	491.483	21.531	1.097	-
1253	0520-00006-V13	EQT00000000321	L484	1-08	469017.804	3340625.735	1.848E+00	12.192	491.483	21.531	1.097	-
1253	0520-00006-V13	EQT00000000324	L485	4-08	469019.921	3340625.729	3.465E-01	12.192	491.483	17.605	0.863	-
1253	0520-00006-V13	SCN00000000001	L486	MSS-BET	469019.921	3340625.729	3.012E-01	1.000	0.000	0.001	1.000	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
1253	0520-00006-V13	EQT00000000370	L487	1-16	469041.868	3340625.667	2.080E+00	12.192	449.817	27.914	1.817	-
132137	0520-00363-01	EQT00000000001	L482	H-1	474469.910	3331157.880	2.495E-01	9.144	810.928	3.658	0.762	-
209722	0520-00508-00	EQT00000000008	L488	6-18-F	445965.802	3335679.385	1.212E+00	4.572	1088.706	299.923	0.335	-

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1253	0520-00006-V13	EQT00000000019	L489	Z2	469604.846	3340403.685	2.797E-01	45.720	1273.000	20.000	1.006	LDEQ default flare stack temperature and stack velocity were utilized. The effective Stack diameter and emission rate is obtained from October 2015 modeling report Appendix C (page 37/42) of EDMS Document ID 9956540.
196978	0520-00492-V1	EQT00000000043	L490	005	470409.720	3339694.060	9.072E-02	60.960	372.039	11.430	3.658	-
17696	0520-00116-02	EQT00000000003	L491	FL-1	468851.511	3341114.671	4.039E-04	6.096	977.594	7.315	0.064	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
196978	0520-00492-V1	EQT00000000025	L492	011A	470537.360	3339762.540	1.720E+00	60.960	353.150	20.147	2.134	-
196978	0520-00492-V1	EQT00000000026	L493	011B	470602.580	3339763.489	1.720E+00	60.960	353.150	20.147	2.134	-
196978	0520-00492-V1	EQT00000000012	L494	006D	470567.480	3339892.820	3.654E-02	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000011	L495	006C	470567.170	3339912.630	3.654E-02	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000010	L496	006B	470566.910	3339932.439	3.654E-02	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000009	L497	006A	470566.620	3339952.250	3.654E-02	45.720	522.039	126.187	0.610	-
11496	0520-00142-V14	EQT00000000084	L498	12-01	470025.000	3340481.000	7.434E-02	1.554	933.150	111.423	0.049	-
11496	0520-00142-V14	EQT00000000102	L499	18-06	470285.441	3340416.558	2.394E-02					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L500. Therefore, this source was excluded from this modeling analysis.
11496	0520-00142-V14	EQT00000000102	L500	18-06	470285.441	3340416.558	2.394E-02	2.374	933.150	134.828	0.070	-
11496	0520-00142-V14	EQT00000000103	L501	17-03	470285.441	3340416.558	1.436E-01	1.701	933.150	82.269	0.070	-
11496	0520-00142-V14	EQT00000000104	L502	18-03	470285.441	3340416.558	2.394E-02					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L503. Therefore, this source was excluded from this modeling analysis.
11496	0520-00142-V14	EQT00000000104	L503	18-03	470285.441	3340416.558	2.394E-02	2.033	933.150	96.536	0.082	-
11496	0520-00142-V14	EQT00000000105	L504	18-02	470285.441	3340416.558	2.394E-02	2.033	933.150	96.536	0.082	-
11496	Regper-ENG	EQT00000000108	L505	18-05	470285.441	3340416.558	2.394E-02					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L506. Therefore, this source was excluded from this modeling analysis.
11496	Regper-ENG	EQT00000000108	L506	18-05	470285.441	3340416.558	2.394E-02	2.374	933.150	134.828	0.070	-
11496	0520-00142-V14	SCN00000000002	L507	88-90a	470285.441	3340416.558	2.051E+00	73.457	513.150	10.973	1.890	SCN00000000002 and SCN00000000003 are alternate operating scenarios for EQT00000000013. Consistent with the modeling analysis performed for this facility and review of the modeling report submitted to LDEQ in October 2019, this source was excluded.
11496	0520-00142-V14	SCN00000000003	L508	Hurricane OP	470285.441	3340416.558	3.018E-01	1.000	0.000	0.001	1.000	
2792	0520-00058-01	EQT00000000014	L509	14-97	470720.102	3340001.392	9.828E-02	24.384	338.706	14.478	0.762	-
2792	0520-00058-01	EQT00000000015	L510	15-97	470720.102	3340001.392	9.828E-02	24.384	338.706	14.478	0.762	-
2792	0520-00058-01	EQT00000000016	L511	16-97	470720.102	3340001.392	9.828E-02	24.384	338.706	7.254	0.762	-
196978	0520-00492-V1	GRP00000000002	L694	BOILERS/HEATERS	470666.797	3340155.010	1.134E+00	1.000	0.000	0.001	1.000	-
11496	0520-00142-V14	EQT00000000064	L512	90-351	470319.754	3340504.340	1.192E+00	24.323	438.150	28.816	0.838	-
11496	0520-00142-V14	EQT00000000046	L513	88-350	470319.769	3340509.880	1.192E+00	24.323	438.150	28.816	0.838	-
11496	0520-00142-V14	EQT00000000028	L514	88-221	470374.604	3340497.543	2.470E-01	32.796	373.706	27.615	0.914	-
11496	0520-00142-V14	EQT00000000029	L515	88-222	470378.454	3340497.532	2.192E-01	32.796	373.706	23.195	0.914	-
11496	0520-00142-V14	EQT00000000024	L516	88-150	470408.468	3340561.723	9.198E-02	29.809	348.150	17.822	0.509	-
11496	0520-00142-V14	EQT00000000013	L517	88-90	470353.979	3340666.034	2.051E+00	73.457	513.150	10.973	1.890	-
33577	7777-00124-00	EQT00000000001	L518	1-78	469467.417	3341451.584	1.310E+00	7.087	410.928	30.053	1.000	-
33577	7777-00124-00	EQT00000000002	L519	2-15	469467.417	3341451.584	8.820E-03	2.667	477.594	4.139	0.076	-
14108	0520-00023-04	EQT00000000001	L520	1-02	470747.766	3340339.962	2.104E-01	6.096	505.372	6.706	0.610	-
11496	0520-00142-V14	EQT00000000018	L521	88-121	470403.500	3340682.522	4.410E-02	33.406	573.150	23.473	0.253	-
11496	0520-00142-V14	EQT00000000021	L522	88-132	470421.667	3340672.943	6.174E-02	33.406	573.150	47.067	0.253	-
11496	0520-00142-V14	EQT00000000020	L523	88-131	470403.525	3340691.720	6.174E-02	33.406	573.150	47.067	0.253	-

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
11496	0520-00142-V14	EQT00000000019	L524	88-122	470421.693	3340682.806	4.410E-02	33.406	573.150	23.473	0.253	-
23782	1763T (M-4)	EQT00000000017	L525	20-17	470721.663	3340586.258	1.688E-01	1.000	0.000	0.001	1.000	-
14462	0520-00457-00	EQT00000000001	L526	00	470588.457	3340771.340	9.450E-03	1.000	0.000	0.001	1.000	-
14462	0520-00457-00	EQT00000000002	L527	01	470588.457	3340771.340	3.780E-02	5.130	805.372	5.605	0.518	-
7856	0520-00110-12	EQT00000000101	L528	20-16	471255.262	3340123.089	1.386E-01	4.572	477.594	1.027	0.229	-
7856	0520-00110-12	EQT00000000102	L529	21-16	471255.262	3340123.089	1.386E-01	4.572	477.594	1.027	0.229	-
203831	3136-V2	EQT00000000006	L560	ETH-FLARE2	470513.640	3342872.670	5.300E-01	13.716	1273.150	20.000	1.379	Maximum hourly emissions from routine and non-routine operations were modeled. Please note that any one of the non-routine operations will occur at any given time. Therefore, the worst-case emissions from among all non-routine operations were modeled. The effective stack diameter is calculated based on heat input of routine and non-routine operations.
203831	3136-V2	EQT00000000005	L566	ETH-FLARE1	470533.023	3342994.734	2.678E-01	39.624	1273.150	22.811	18.288	The emission rate was updated based on the routine emissions. EQT00000000005 and EQT00000000006 are under GRP00000000001, the non-routine emissions from GRP00000000001 were modeled under EQT00000000006.
203831	3136-V2	EQT00000000001	L579	ETH-BOILER	470754.370	3342958.902	1.856E+00	64.922	422.039	15.545	2.134	-
195519	0520-00488-V4	EQT00000000020	L580	MEG-TOX	470817.959	3342985.993	9.941E-01	15.240	533.150	14.603	1.366	-
203831	3136-V2	EQT00000000011	L581	ETH-H-1101	470723.044	3343084.648	5.026E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000012	L582	ETH-H-1102	470723.083	3343099.386	5.026E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000013	L583	ETH-H-1103	470723.092	3343102.600	5.026E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000014	L584	ETH-H-1104	470723.035	3343117.338	5.026E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000015	L585	ETH-H-1105	470723.046	3343121.438	5.026E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000016	L586	ETH-H-1106	470723.081	3343134.847	5.026E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000017	L587	ETH-H-1107	470723.091	3343138.393	5.026E+00	73.152	397.594	10.973	2.350	-
1255	2106-V7	EQT00000000066	L595	011	471622.980	3343764.004	8.215E+01	24.994	420.928	19.227	4.840	-
1255	2106-V7	EQT00000000065	L596	010	471622.964	3343795.032	8.768E+00	24.994	420.928	19.114	4.840	-
1255	897-V9	EQT00000000080	L597	030	472129.321	3343376.630	4.612E-01	45.720	444.261	3.645	2.374	-
1255	2106-V7	EQT00000000064	L598	009	471673.035	3343769.969	5.104E+01	24.384	449.817	14.691	5.334	-
1255	2106-V7	EQT00000000663	L599	009A	471684.968	3343770.049	5.104E+01	24.384	449.817	19.998	4.572	-
1255	897-V9	EQT00000000077	L600	016	472122.472	3343407.675	9.778E-01	46.634	505.372	9.921	1.219	-
1255	897-V9	EQT00000000078	L601	017	472137.482	3343406.751	9.778E-01	46.634	505.372	9.921	1.219	-
1255	2106-V7	EQT00000000063	L602	008	471673.016	3343837.011	5.104E+01	24.384	449.817	14.691	5.334	-
1255	2798-V5	EQT00000000599	L603	159	471866.017	3343747.974	1.588E-01	4.572	533.150	140.126	0.076	-
1255	Regper-ENG	EQT00000000686	L605	162	471877.964	3343753.705	2.520E-02	2.438	668.150	63.045	0.101	-
1255	2359-V6	EQT00000000552	L604	34	472277.000	3343415.000	4.101E+00	4.572	477.594	30.267	0.229	-
1255	897-V9	EQT00000000079	L606	021	472139.364	3343541.606	1.411E-01	12.192	1144.261	3.679	0.838	-
1255	2269-V7	EQT00000000353	L613	544	472811.000	3343073.000	1.260E-03	3.658	349.817	1.631	0.052	-
1255	2269-V7	EQT00000000685	L614	044	472314.042	3343661.949	2.772E-01	2.420	477.594	65.666	0.101	-
1255	2040-V10	EQT00000000261	L615	345	472312.996	3343704.947	1.186E+00	23.774	338.706	12.229	1.067	-
1255	2106-V7	EQT00000000068	L616	033	472780.965	3343317.036	8.215E+01	30.480	366.483	28.109	5.410	-
1255	2040-V10	EQT00000000392	L617	346	472371.963	3343696.044	7.799E-01	29.870	316.483	12.713	0.914	-
1255	2040-V10	EQT00000000393	L618	347	472371.963	3343696.044	3.780E-02	30.175	344.261	3.688	0.762	-
1255	2106-V7	EQT00000000067	L619	032	472780.978	3343361.029	8.215E+01	30.480	366.483	28.109	5.410	-
1255	2270-V6	EQT00000000602	L627	22	472377.700	3343897.800	6.426E-02	12.802	644.261	4.877	0.610	-
1255	2106-V7	EQT00000000062	L628	007	472966.976	3343391.042	5.351E+01	45.720	429.817	13.701	3.200	-
1255	2798-V5	EQT00000000598	L629	158	472705.040	3343665.954	1.588E-01	4.572	533.150	140.126	0.076	-
185422	0520-00471-V1	EQT00000000001	L630	23	471898.320	3344421.299	6.322E+01	24.384	616.483	18.370	1.981	-
185422	0520-00471-V1	EQT00000000002	L631	29	471898.320	3344421.299	3.936E+00	33.528	399.817	16.170	0.610	-
185422	0520-00471-V1	EQT00000000003	L632	200	471898.320	3344421.299	4.889E-01	25.908	360.928	13.201	1.067	-
185422	0520-00471-V1	EQT00000000019	L633	220	471898.320	3344421.299	2.772E-01	20.117	413.706	23.040	1.015	-
185422	0520-00471-V1	EQT00000000044	L634	247	471898.320	3344421.299	3.049E-01	41.910	385.928	26.786	1.219	-
185422	0520-00471-V1	EQT00000000071	L635	564	471898.320	3344421.299	2.690E-01	4.572	366.483	0.001	0.204	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
185422	0520-00471-V1	EQT00000000087	L636	282	471898.320	3344421.299	2.293E-01	41.300	385.928	20.199	1.219	-

1-hr NO_2 NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
185422	0520-00471-V1	EQT00000000093	L637	604	471898.320	3344421.299	4.838E-01	9.296	672.039	3.261	1.372	-
185422	0520-00471-V1	EQT00000000094	L638	605	471898.320	3344421.299	4.838E-01	9.296	672.039	3.261	1.372	-
1255	2695-V16	EQT00000000433	L639	20	472318.988	3344172.010	7.825E-03	16.968	644.261	10.129	0.610	It is an intermittent source. Per March 1, 2011 1-hr NO_2 modeling memo, the emissions were normalized.
1255	2798-V5	EQT00000000600	L640	160	472649.961	3343921.960	5.078E-01	4.572	533.150	94.387	0.076	-
1255	2695-V16	EQT00000000432	L644	15	472438.967	3344165.946	8.316E-01	38.710	505.372	6.840	1.448	-
1255	2798-V5	TRT00000000001	L645	019A	472894.020	3343891.987	1.928E-01	19.812	644.261	4.761	0.914	-
1255	2798-V5	EQT00000000601	L646	161	472744.034	3344061.017	4.662E-02	6.300	533.150	9.010	0.457	-
1255	2206-V3	EQT00000000139	L647	26	472490.851	3344364.393	3.591E-01	5.486	505.372	13.664	0.610	-
1255	2206-V3	EQT00000000140	L648	27	472490.851	3344364.393	5.565E+00	13.716	1255.372	133.198	0.067	-
84822	0520-00523-V0	EQT00000000001	L667	001	469993.108	3346777.829	9.450E-02	1.000	0.000	0.001	1.000	-
84822	0520-00523-V0	EQT00000000002	L668	002	469993.518	3346787.025	3.906E-01	1.000	0.000	0.001	1.000	-
2538	2627-V12	RLP00000000074	L669	4-5 SRU	472872.628	3345200.635	1.818E+00	45.720	532.594	16.657	1.079	-
2538	2627-V12	EQT00000000330	L671	FL-76002	473136.842	3345043.737	1.957E+00	115.824	1273.150	4.621	1.372	-
2538	2627-V12	EQT00000000336	L672	H-12003	472816.165	3345323.778	2.029E-01	36.576	498.706	6.916	1.183	-
2538	2627-V12	EQT00000000334	L673	H-12001	472845.992	3345323.704	1.449E-01	36.576	518.150	7.416	0.978	-
2538	2627-V12	EQT00000000335	L674	H-12002	472845.992	3345323.704	1.348E-01	36.576	518.150	7.416	0.978	-
2538	2627-V12	EQT00000000331	L676	H-11001	472898.911	3345323.573	3.125E-01	49.164	511.483	6.654	1.487	-
2538	2627-V12	EQT00000000332	L681	H-11002	472922.965	3345323.514	2.192E-01	36.576	512.039	7.114	1.231	-
2538	2627-V12	EQT00000000333	L682	H-11003	472922.965	3345323.514	1.625E-01	36.576	490.372	6.468	1.055	-
2538	2624-V25	EQT00000000080	L689	EP-31	473355.000	3345078.000	2.019E+00	76.200	999.817	24.933	1.067	-

NO_2 Annual NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
742	0520-00081-11	EQT00000000060	L1	TDU TO-1	461179.915	3331852.423	4.948E-02	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000061	L2	TDU TO-2	461179.915	3331852.423	4.948E-02	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000062	L3	ORU TO-1	461179.915	3331852.423	4.948E-02	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000073	L4	TDU H-1	461179.915	3331852.423	3.950E-01	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000074	L5	TDU H-2	461179.915	3331852.423	3.950E-01	10.973	1088.706	5.081	1.524	-
742	Regper-Emerg Eng	EQT00000000156	L6	TDU DGEN-1	461179.915	3331852.423	7.812E-01	1.000	0.000	0.001	1.000	-
742	0520-00081-11	ARE00000000001	L7	BH-307	461091.760	3331905.039	3.515E-01	19.812		13.713		This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L8. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	ARE00000000001	L8	BH-307	461091.760	3331905.039	2.936E-01	19.812	294.261	13.713	1.000	-
742	0520-00081-11	ARE00000000002	L9	BH-308	461091.978	3331966.539	3.515E-01	19.812	294.261	12.162	1.000	-
742	0520-00081-11	ARE00000000002	L10	BH-308	461091.978	3331966.539	2.936E-01	19.812		12.162		This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L9. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	EQT00000000037	L11	EMER-GEN 1	461248.000	3332000.000	2.772E+00	6.096	533.150			This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L12. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	EQT00000000037	L12	EMER-GEN 1	461248.000	3332000.000	2.311E+00	3.048	800.150	101.471	0.152	-
742	0520-00081-11	EQT00000000038	L13	EMER-GEN 2	461248.000	3332000.000	2.772E+00	3.048	800.150	101.471	0.152	-
742	0520-00081-11	EQT00000000038	L14	EMER-GEN 2	461248.000	3332000.000	2.311E+00	6.096	533.150			This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L13. Therefore, this source was excluded from this modeling analysis.
742	Regper-Emerg Eng	EQT00000000157	L15	0	460825.271	3332223.020	1.008E-01	1.000	0.000	0.001	1.000	-
742	0520-00081-11	EQT00000000075	L16	TDU GEN-1	461284.872	3332112.131	3.780E-01	1.000	0.000	0.001	1.000	-
742	0520-00081-11	EQT00000000076	L17	TDU GEN-2	461284.872	3332112.131	3.780E-01	1.000	0.000	0.001	1.000	-
742	0520-00081-11	EQT00000000096	L18	ORU GEN-1	461284.872	3332112.131	3.780E-01	1.000	0.000	0.001	1.000	-
742	0520-00081-11	EQT00000000040	L19	DM-2	461027.000	3332266.000	5.342E-01	3.048	716.483	419.755	0.076	-
742	0520-00081-11	EQT00000000039	L20	DM-1	461073.000	3332262.999	1.880E+00	3.048	716.483	148.724	0.128	-
123032	0520-00328-03	EQT00000000016	L21	16-04-F	455303.286	3329864.685	1.174E-01	7.620	1088.706	224.311	0.122	-
123032	0520-00328-03	EQT00000000029	L22	33-16-ICE-ES	455303.286	3329864.685	8.063E-01	3.048	905.372	22.028	0.152	-
123032	0520-00328-03	EQT00000000030	L23	34-16-GR-BS	455303.286	3329864.685	7.192E-03	3.048	533.150	5.700	0.152	-
196950	0520-00490-00	EQT00000000001	L24	1-15-ICE-ES	455072.081	3332235.819	7.077E-02	3.810	555.372	12.924	0.152	-
90769	0520-00263-03	EQT00000000015	L25	19-12-ICE-ES	455139.698	3332398.661	4.890E-02	3.048	569.261	9.845	0.152	-
199894	0520-00505-00	EQT00000000001	L26	MVC-1	465543.123	3325616.364	2.595E-01	15.240	2199.817	18.288	3.353	-
216323	1340-00369-01	EQT00000000001	L27	MVC-1	465543.123	3325616.364	1.067E-01	15.240	1019.261	0.015	3.353	-
216323	1340-00369-01	EQT00000000014	L28	GEN-1	465543.123	3325616.364	2.016E+00	3.658	505.372	5.758	0.305	-
199894	0520-00505-00	EQT00000000003	L29	BL-1	465540.986	3325610.830	3.279E-02	8.534	519.261	10.058	0.762	-
216323	1340-00369-01	EQT00000000003	L30	BL-1	465540.986	3325610.830	2.718E-01	8.534	519.261	10.058	0.762	-
184675	0520-00472-00	EQT00000000003	L31	003	465862.442	3325671.441	4.557E-01	1.000	294.261	0.001	1.000	-
201334	0520-00504-V0	EQT00000000017	L32	P05TU01	466843.037	3329201.005	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000018	L33	P05TU02	466842.025	3329248.989	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000019	L34	P05TU03	466841.980	3329297.968	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000020	L35	P05TU04	466840.971	3329346.950	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000060	L36	ESSGEN05	466845.964	3329437.025	1.966E+00	4.877	727.594	45.110	0.250	-
201334	0520-00504-V0	EQT00000000025	L37	P05TO01	466847.048	3329509.049	1.053E+00	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000042	L38	P05H01	466869.968	3329537.016	1.725E-01	30.480	566.483	7.620	1.036	-
201334	0520-00504-V0	EQT00000000013	L39	P04TU01	467005.022	3329202.956	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000014	L40	P04TU02	467004.013	3329252.049	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000015	L41	P04TU03	467003.000	3329300.033	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000016	L42	P04TU04	467001.991	3329349.015	9.208E-01	46.330	647.039	30.480	3.109	-

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AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
201334	0520-00504-V0	EQT00000000059	L43	ESSGEN04	467001.023	3329411.959	1.966E+00	4.877	727.594	45.110	0.250	-
201334	0520-00504-V0	EQT00000000024	L44	P04TO01	467007.968	3329511.004	1.053E+00	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000041	L45	P04H01	467032.048	3329539.964	1.725E-01	30.480	566.483	7.620	1.036	-
149553	0520-00386-01	EQT00000000001	L46	GDR-1	454303.086	3334447.180	2.877E-03	3.658	574.817	0.451	0.101	-
149553	0520-00386-01	EQT00000000018	L47	HT-1	454303.086	3334447.180	5.466E-03	3.658	574.817	0.195	0.152	-
149553	0520-00386-01	EQT00000000019	L48	LH-1	454303.086	3334447.180	1.151E-03	3.658	574.817	0.195	0.152	-
201334	0520-00504-V0	EQT00000000009	L49	P03TU01	467166.043	3329205.024	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000010	L50	P03TU02	467165.033	3329254.005	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000011	L51	P03TU03	467164.987	3329302.984	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000012	L52	P03TU04	467163.973	3329350.969	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000058	L53	ESSGEN03	467162.042	3329414.026	1.966E+00	4.877	727.594	45.110	0.250	-
201334	0520-00504-V0	EQT00000000023	L54	P03TO01	467170.045	3329512.957	1.053E+00	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000040	L55	P03H01	467192.968	3329542.032	1.725E-01	30.480	566.483	7.620	1.036	-
201334	0520-00504-V0	EQT00000000030	L56	GFLR2W	467224.966	3329059.020	1.218E+01	45.720	1273.150	20.001	16.785	EQT00000000028 and EQT00000000030 are part of GRP00000000001 source. Therefore, GRP00000000001 annual emissions were split equally between these two sources.
201334	0520-00504-V0	EQT00000000028	L57	GFLR2D	467263.992	3329059.015	1.218E+01	45.720	1273.150	20.001	17.776	EQT00000000028 and EQT00000000030 are part of GRP00000000001 source. Therefore, GRP00000000001 annual emissions were split equally between these two sources.
201334	0520-00504-V0	EQT00000000031	L58	DFLARE01	467286.997	3328920.986	2.762E-02	106.680	1273.150	20.001	0.314	-
201334	0520-00504-V0	EQT00000000033	L59	WFLARE01	467287.006	3328923.978	3.481E-02	106.680	1273.150	20.001	0.354	-
201334	0520-00504-V0	EQT00000000005	L60	P02TU01	467328.031	3329207.977	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000006	L61	P02TU02	467327.017	3329255.961	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000007	L62	P02TU03	467326.007	3329305.054	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000008	L63	P02TU04	467324.996	3329354.036	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000057	L64	ESSGEN02	467324.023	3329415.982	1.966E+00	4.877	727.594	45.110	0.250	-
201334	0520-00504-V0	EQT00000000022	L65	P02TO01	467330.969	3329516.024	1.053E+00	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000039	L66	P02H01	467355.044	3329543.988	1.725E-01	30.480	566.483	7.620	1.036	-
201334	0520-00504-V0	EQT00000000034	L67	WFLARE02	467471.003	3328840.989	3.481E-02	106.680	1273.150	20.001	0.354	-
201334	0520-00504-V0	EQT00000000032	L68	DFLARE02	467471.958	3328837.994	2.762E-02	106.680	1273.150	20.001	0.314	-
201334	0520-00504-V0	EQT00000000001	L69	P01TU01	467488.956	3329210.049	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000002	L70	P01TU02	467488.041	3329259.031	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000003	L71	P01TU03	467487.990	3329307.012	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000004	L72	P01TU04	467486.978	3329355.994	9.208E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000056	L73	ESSGEN01	467485.045	3329419.051	1.966E+00	4.877	727.594	45.110	0.250	-
201334	0520-00504-V0	EQT00000000029	L74	GFLR1W	467505.000	3329062.955	7.853E+01	45.720	1273.150	20.001	16.785	Based on current permit (EDMS Document ID: 11210918) SR No. 181, both wet gas ground flares (EQT0029 and EQT0030) can only be operated simultaneously 1) during commissioning or 2) if the total gas volume simultaneously flared through both wet gas ground flares doesn't exceed the maximum gas volume from one wet gas ground flare alone. Therefore, only modeled one dry gas ground flare (Model ID: L56) to avoid double-counting.
201334	0520-00504-V0	EQT00000000021	L75	P01TO01	467493.045	3329517.983	1.053E+00	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000038	L76	P01H01	467515.967	3329546.948	1.725E-01	30.480	566.483	7.620	1.036	-

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AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
201334	0520-00504-V0	EQT00000000027	L77	GFLR1D	467544.025	3329062.950	8.808E+01	45.720	1273.150	20.001	17.776	Based on current permit (EDMS Document ID: 11210918) SR No. 180, both dry gas ground flares (EQT0027 and EQT0028) can only be operated simultaneously 1) during commissioning or 2) if the total gas volume simultaneously flared through both dry gas ground flares doesn't exceed the maximum gas volume from one dry gas ground flare alone. Therefore, only modeled one dry gas ground flare (Model ID: L57) to avoid double-counting.
201334	0520-00504-V0	EQT00000000048	L78	SWP2P01	467571.964	3329649.948	7.272E-01	7.620	665.372	56.693	0.305	-
201334	0520-00504-V0	EQT00000000049	L79	SWP2P02	467578.998	3329650.038	7.272E-01	7.620	665.372	56.693	0.305	-
201334	0520-00504-V0	EQT00000000050	L80	SWP2P03	467587.959	3329650.012	2.880E-02	7.620	665.372	56.693	0.229	-
201334	0520-00504-V0	EQT00000000026	L81	CVTO	467691.967	3329433.956	3.136E-01	22.860	1255.372	15.850	2.286	-
201334	0520-00504-V0	EQT00000000053	L82	LNGBP2	467738.992	3329204.992	1.440E-02	7.620	665.372	56.693	0.229	-
201334	0520-00504-V0	EQT00000000052	L83	LNGBP1	467739.010	3329210.976	7.272E-01	7.620	665.372	56.693	0.305	-
201334	0520-00504-V0	EQT00000000061	L84	MAGEN	467734.953	3329405.019	1.008E+00	4.877	727.594	45.110	0.250	-
201334	0520-00504-V0	EQT00000000062	L85	CRGEN	467717.047	3329968.992	1.966E+00	4.877	727.594	45.110	0.250	-
201334	0520-00504-V0	EQT00000000035	L86	MFLARE01	467786.005	3328871.976	7.364E-02	57.912	1273.150	20.001	5.200	-
201334	0520-00504-V0	EQT00000000036	L87	MFLARE01-MSS	467786.005	3328871.976	1.519E-01	57.912	1273.150	20.001	9.775	-
201334	0520-00504-V0	EQT00000000045	L88	SWP1P01	467855.987	3328814.039	4.320E-02	7.620	665.372	56.693	0.305	-
201334	0520-00504-V0	EQT00000000046	L89	SWP1P02	467855.966	3328806.947	2.160E-02	7.620	665.372	56.693	0.229	-
201334	0520-00504-V0	EQT00000000047	L90	SWP1P03	467855.966	3328806.947	2.160E-02	7.620	665.372	56.693	0.229	-
201334	0520-00504-V0	EQT00000000063	L91	LOGEN	467876.026	3329176.002	1.966E+00	4.877	727.594	45.110	0.250	-
201334	0520-00504-V0	EQT00000000055	L92	FWP02	467849.995	3329962.951	4.536E-01	7.620	665.372	56.693	0.213	-
201334	0520-00504-V0	EQT00000000054	L93	FWP01	467857.029	3329963.042	4.536E-01	7.620	665.372	56.693	0.213	-
99407	0560-00184-V10	EQT00000000087	L94	EU11G	467167.900	3325065.000	5.544E-01	3.048	745.928	72.847	0.155	-
99407	0560-00184-V10	EQT00000000088	L95	EU11H	467167.900	3325065.000	5.544E-01	3.048	745.928	72.847	0.155	-
99407	0560-00184-V10	EQT00000000089	L96	EU11I	467167.900	3325065.000	5.544E-01	3.048	745.928	72.847	0.155	-
205014	0520-00499-00	EQT00000000001	L97	2-16	468121.000	3330164.999	1.310E+00	9.144	388.706	28.285	15.316	-
205014	0520-00499-00	EQT00000000002	L98	3-16	468121.000	3330164.999	3.567E-02	2.713	477.594	8.839	3.658	-
99407	0560-00184-V10	EQT00000000090	L99	EU05F	467307.600	3324638.000	5.393E+00	12.192	729.261	75.590	0.387	-
99407	0560-00184-V10	EQT00000000091	L100	EU05G	467326.000	3324637.999	5.393E+00	12.192	729.261	75.590	0.387	-
99407	0560-00184-V10	EQT00000000092	L101	EU05H	467344.600	3324639.000	5.393E+00	12.192	729.261	75.590	0.387	-
99407	0560-00184-V10	EQT00000000096	L102	EU15J	467622.900	3325082.000	7.362E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000095	L103	EU15I	467624.200	3325016.000	7.362E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000094	L104	EU15H	467628.900	3324712.000	7.364E+00	45.720	809.261	43.891	4.572	-
99407	0560-00184-V10	EQT00000000081	L105	EU13C	467808.800	3325051.000	2.157E+00	64.922	1088.706	12.878	3.886	-
99407	0560-00184-V10	EQT00000000082	L106	EU13D	467808.800	3325051.000	2.157E+00	64.922	1088.706	12.878	3.886	-
99407	0560-00184-V10	EQT00000000093	L107	EU15G	467615.400	3324641.000	7.364E+00	45.720	809.261	43.891	4.572	-
99407	0560-00184-V10	EQT00000000044	L108	EU11D	467278.800	3323869.000	5.544E-01	3.048	745.928	72.847	0.155	-
99407	0560-00184-V10	EQT00000000045	L109	EU11E	467278.800	3323869.000	5.544E-01	3.048	745.928	72.847	0.155	-
99407	0560-00184-V10	EQT00000000046	L110	EU11F	467278.800	3323869.000	5.544E-01	3.048	745.928	72.847	0.155	-
99407	0560-00184-V10	EQT00000000073	L111	EU15F	467635.400	3324347.000	7.362E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000072	L112	EU15E	467622.000	3324271.000	7.362E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000053	L113	EU05E	467366.400	3323846.999	5.393E+00	12.192	729.261	75.590	0.387	-
99407	0560-00184-V10	EQT00000000052	L114	EU05D	467366.700	3323828.000	5.393E+00	12.192	729.261	75.590	0.387	-
99407	0560-00184-V10	EQT00000000051	L115	EU05C	467367.000	3323810.000	5.393E+00	12.192	729.261	75.590	0.387	-
99407	0560-00184-V10	EQT00000000079	L116	EU20	467911.900	3324747.000	7.796E-01	13.716	1273.150	19.995	0.329	-
99407	0560-00184-V10	EQT00000000084	L117	SSM	467911.900	3324747.000	6.990E+00	13.716	1273.150	19.995	0.329	-
99407	0560-00184-V10	EQT00000000071	L118	EU15D	467636.800	3323973.000	7.362E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000083	L119	EU20A	467390.700	3323569.000	2.350E-01	57.912	1273.150	0.091	0.823	-
17904	0520-00156-V4	EQT00000000005	L120	8-90	467000.233	3334799.757	2.570E+00	4.572	755.372	0.378	0.134	-
142099	0520-00376-02	EQT00000000001	L121	2-06-GR-BS	450019.590	3329216.316	3.164E-03	4.572	533.150	2.286	0.152	-
142099	0520-00376-02	EQT00000000009	L122	6-06-F	450019.590	3329216.316	4.516E-02	7.620	1088.706	130.150	0.091	-
142099	0520-00376-02	EQT00000000017	L123	18-13-ICE-ES	450019.590	3329216.316	2.445E-01	3.048	810.928	7.925	0.152	-
99407	0560-00184-V10	EQT00000000070	L124	EU15C	467628.500	3323901.000	7.364E+00	45.720	809.261	43.891	4.572	-

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AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
134011	0520-00498-00	EQT00000000001	L125	001	464945.278	3336794.326	9.600E-02	1.000	0.000	0.001	1.000	-
134011	0520-00498-00	EQT00000000002	L126	002	464945.278	3336794.326	3.904E-01	1.000	0.000	0.001	1.000	-
81859	0520-00219-V6	EQT00000000004	L127	3-99	466600.157	3335399.908	7.451E-02	7.010	651.483	138.379	0.152	-
99407	0560-00184-V10	EQT00000000001	L128	EU01A	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	Consistent with the air dispersion modeling analysis performed for this facility, the vaporization sources were excluded from the off-property inventory. Refer to April 2013 air dispersion modeling report (pg 16/105) (EDMS Document ID: 8785365).
99407	0560-00184-V10	EQT00000000002	L129	EU01B	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000003	L130	EU01C	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000004	L131	EU01D	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000005	L132	EU01E	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000006	L133	EU01F	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000007	L134	EU01G	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000008	L135	EU01H	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000009	L136	EU01I	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000010	L137	EU01J	467247.295	3323081.245	1.667E+00	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000016	L138	EU03A	467247.295	3323081.245	4.027E-02	34.686	394.261	0.030	0.381	-
99407	0560-00184-V10	EQT00000000021	L139	EU03B	467247.295	3323081.245	4.027E-02	34.686	394.261	0.030	0.381	-
99407	0560-00184-V10	EQT00000000041	L140	EU11A	467455.000	3323328.000	6.300E-01	3.048	658.150	74.981	0.076	-
99407	0560-00184-V10	EQT00000000042	L141	EU11B	467455.000	3323328.000	6.300E-01	3.048	658.150	74.981	0.076	-
99407	0560-00184-V10	EQT00000000043	L142	EU11C	467455.000	3323328.000	6.300E-01	3.048	658.150	74.981	0.076	-
99407	0560-00184-V10	EQT00000000069	L143	EU15B	467648.600	3323602.999	7.364E+00	45.720	809.261	43.891	4.572	-
99407	0560-00184-V10	EQT00000000068	L144	EU15A	467649.800	3323536.999	7.364E+00	45.720	809.261	43.891	4.572	-
81859	0520-00219-V6	EQT00000000005	L145	4-99	466600.817	3335680.373	4.788E-01	3.048	533.150	9.144	0.152	-
81859	Regper-Eng	EQT00000000006	L146	Emergency Diesel Engine	466600.817	3335680.373	2.016E-01	1.000	0.000	0.001	1.000	-
81859	0520-00219-V6	SCN00000000001	L147	1-99SU/SD	466600.817	3335680.373	6.605E+01	1.000	0.000	0.001	1.000	It is an alternate operating scenario of EQT00000000002. The emissions from EQT00000000002 are modeled under Model ID: L114. Therefore, this source was excluded.
81859	0520-00219-V6	SCN00000000002	L148	2-99SU/SD	466600.817	3335680.373	6.605E+01	1.000	0.000	0.001	1.000	It is an alternate operating scenario of EQT00000000003. The emissions from EQT00000000003 are modeled under Model ID: L115. Therefore, this source was excluded.
81859	0520-00219-V6	EQT00000000002	L149	1-99	466601.009	3335680.261	6.605E+01	21.336	879.261	23.622	7.567	The stack diameter is calculated based on the permitted flow rate and stack velocity.
81859	0520-00219-V6	EQT00000000003	L150	2-99	466601.009	3335680.261	6.605E+01	21.336	879.261	36.363	6.095	The stack diameter is calculated based on the permitted flow rate and stack velocity.
145324	0560-00253-02	EQT00000000008	L151	GE-01	451585.657	3323182.284	6.300E-01	7.620	810.928	76.880	0.152	-
145324	0560-00253-02	EQT00000000009	L152	GE-02	451585.657	3323182.284	6.300E-01	7.620	810.928	76.880	0.152	-
145324	0560-00253-02	EQT00000000010	L153	GR-01	451585.657	3323182.284	8.342E-03	7.620	449.817	1.747	0.305	-
145324	0560-00253-02	EQT00000000015	L154	PE-01	451585.657	3323182.284	5.850E-01	7.620	755.372	66.318	0.152	-
145324	0560-00253-02	EQT00000000016	L155	PE-02	451585.657	3323182.284	5.850E-01	7.620	755.372	66.318	0.152	-
145324	0560-00253-02	EQT00000000034	L156	CE-02	451585.657	3323182.284	6.933E-01	6.096	727.594	67.147	0.253	-
154027	0520-00403-02	EQT00000000005	L157	ENG-1	465122.055	3337032.011	1.512E-01	3.048	717.594	103.022	0.076	-
154027	0520-00403-02	EQT00000000006	L158	ENG-2	465122.055	3337032.011	7.056E-01	5.486	785.372	126.797	0.101	-
99407	0560-00184-V10	EQT00000000056	L159	EU13A	467835.000	3323584.000	2.157E+00	64.922	1088.706	12.878	3.886	-
99407	0560-00184-V10	EQT00000000057	L160	EU13B	467835.000	3323584.000	2.157E+00	64.922	1088.706	12.878	3.886	-
154027	0520-00403-02	EQT00000000001	L161	FL-01	465202.167	3337000.951	8.630E-04	33.528	1273.150	0.198	0.509	-
154027	0520-00403-02	EQT00000000002	L162	HT-01	465202.167	3337000.951	5.935E-01	12.247	423.150	26.591	0.978	-
154027	0520-00403-02	SCN00000000001	L163	0	465197.432	3337026.231	6.041E-01	1.000	0.000	0.001	1.000	-
154027	0520-00403-02	SCN00000000002	L164	0	465197.432	3337026.231	6.032E-01	1.000	0.000	0.001	1.000	-
99407	0560-00184-V10	EQT00000000022	L165	EU05B	467399.100	3322815.000	3.881E+00	7.202	744.261	63.901	0.357	-
99407	0560-00184-V10	EQT00000000020	L166	EU05A	467403.910	3322816.000	3.881E+00	7.202	744.261	63.901	0.357	-
99407	0560-00184-V10	EQT00000000047	L167	EU12A	468022.000	3323643.000	3.276E-01	3.048	658.150	74.981	0.076	-
99407	0560-00184-V10	EQT00000000048	L168	EU12B	468022.000	3323643.000	3.276E-01	3.048	658.150	74.981	0.076	-
7935	0560-00005-12	EQT00000000010	L169	GR-BS-1	459196.960	3318891.035	2.877E-03	3.658	533.150	2.286	0.152	-
7935	0560-00005-12	EQT00000000012	L170	HAC-COMP-1	459196.960	3318891.035	1.058E+00	7.315	866.483	62.484	0.253	-
7935	0560-00005-12	EQT00000000015	L171	HAC-PU-2	459196.960	3318891.035	2.166E-01	6.096	810.928	27.950	0.076	-

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AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
7935	0560-00005-12	EQT00000000016	L172	HAC-PU-5	459196.960	3318891.035	2.166E-01	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000017	L173	HAC-PU-3	459196.960	3318891.035	2.166E-01	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000019	L174	HAC-PU-6	459196.960	3318891.035	2.166E-01	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000020	L175	HAC-PU-1	459196.960	3318891.035	2.166E-01	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000022	L176	HAC-PU-8	459196.960	3318891.035	2.166E-01	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000062	L177	HAC-TP-1	459196.960	3318891.035	1.692E-01	3.048	810.928	31.699	0.076	-
7935	0560-00005-12	EQT00000000064	L178	HAC-INJ-1	459196.960	3318891.035	3.863E-01	3.048	810.928	49.682	0.076	-
7935	0560-00005-12	EQT00000000095	L179	HAC-COMP-2A	459196.960	3318891.035	7.431E-01	3.048	848.150	18.258	0.152	-
99407	0560-00184-V10	EQT00000000049	L180	EU12C	467961.000	3323465.000	5.544E-01	3.048	745.928	72.847	0.155	-
99407	0560-00184-V10	EQT00000000050	L181	EU12D	467961.000	3323465.000	5.544E-01	3.048	745.928	72.847	0.155	-
99407	0560-00184-V10	EQT00000000017	L182	EU04	467626.700	3322830.060	3.835E-01	57.912	0.000	0.091	0.823	-
172983	0520-00438-02	ARE00000000008	L183	1b	463967.371	3338097.664	3.136E-02	9.144	293.150	0.001	1.000	-
17904	0520-00156-V4	EQT00000000008	L184	1-07	467752.205	3334958.867	3.049E-02	9.144	422.039	1.524	0.792	-
1251	0520-00001-V20	EQT00000000026	L185	10-96	467095.030	3335773.959	3.021E-02	32.004	392.039	84.978	0.204	-
1251	0520-00001-V20	EQT00000000033	L186	12-96	467079.980	3335796.942	1.848E+01	40.234	810.928	7.925	0.914	-
7935	0560-00005-12	EQT00000000023	L187	HAC-PU-4	459200.000	3318700.000	2.166E-01	6.096	810.928	27.950	0.076	-
1251	0520-00001-V20	RLP00000000004	L188	11-96	467108.967	3335796.966	2.520E+00	60.960	534.817	30.267	1.219	-
30168	0520-00194-07	EQT00000000001	L189	F-1	466537.753	3336411.929	2.934E-02	76.200	810.928	18.288	0.610	-
30168	0520-00194-07	EQT00000000003	L190	H-1	466537.753	3336411.929	1.210E+00	51.511	477.594	0.001	1.000	-
30168	0520-00194-07	EQT00000000005	L191	FE-1	466537.753	3336411.929	6.804E-01	4.572	477.594	25.268	0.049	-
30168	0520-00194-07	EQT00000000006	L192	FE-2	466537.753	3336411.929	6.804E-01	4.572	477.594	25.268	0.049	-
9002	0560-00019-05	EQT00000000002	L193	6-78	461018.540	3318761.792	4.511E+00	1.000	0.000	0.001	1.000	-
9002	0560-00019-05	EQT00000000005	L194	8-78	461018.540	3318761.792	3.024E+01	1.000	0.000	0.001	1.000	-
9002	0560-00019-05	EQT00000000019	L195	7-11	461018.540	3318761.792	9.692E-01	1.000	0.000	0.001	1.000	-
1251	0520-00001-V20	EQT00000000178	L196	12-15	467093.000	3335897.000	3.078E-02	32.004	392.039	85.009	0.204	-
1251	0520-00001-V20	EQT00000000177	L197	11-15	467094.000	3335903.000	2.067E+00	60.960	534.817	30.267	1.219	-
1251	0520-00001-V20	RLP00000000142	L198	8-15	467084.000	3335923.000	9.692E-02	40.234	810.928	7.925	0.914	-
1251	0520-00001-V20	EQT00000000181	L199	15-15	467118.000	3335893.000	9.828E-01	3.048	755.372	93.848	0.152	-
1251	0520-00001-V20	EQT00000000142	L200	1-07	467165.000	3335842.000	4.537E-01	33.528	394.261	25.176	0.914	-
1251	0520-00001-V20	EQT00000000091	L201	5-91	467061.000	3335960.999	2.937E-01	32.004	330.372	20.208	1.006	-
1251	0520-00001-V20	EQT00000000152	L202	3-12	467218.000	3335808.000	4.537E-01	33.528	394.261	25.176	0.914	-
3439	0520-00048-V7	EQT00000000025	L203	EP-WP	467747.423	3335167.209	2.016E-01	1.524	727.594	37.673	0.076	-
1251	0520-00001-V20	EQT00000000055	L204	28-90	467111.000	3335927.000	9.300E-01	39.624	344.817	11.034	2.920	-
3439	0520-00048-V7	EQT00000000017	L205	ED-K2	467684.355	3335269.563	5.040E-02	1.524	938.706	5.145	0.076	-
3439	0520-00048-V7	EQT00000000019	L206	ED-K1	467684.355	3335269.563	5.040E-02	1.524	938.706	6.809	0.076	-
3439	0520-00048-V7	EQT00000000023	L207	8-12	467684.355	3335269.563	3.711E-02	3.048	449.817	3.432	0.305	-
3439	N/A	EQT00000000031	L208	SNED-K1	467684.355	3335269.563	3.780E-02	1.000	0.000	0.001	1.000	-
1251	0520-00001-V20	EQT00000000057	L209	3-01	467129.000	3335961.000	6.591E-01	60.655	345.928	16.124	1.372	-
3439	0520-00048-V7	RLP00000000006	L210	4-87	467738.093	3335269.405	5.216E+01	60.960	1366.483	17.904	5.182	-
1251	0520-00001-V20	EQT00000000182	L211	16-15	467119.000	3336019.000	7.560E-02	1.829	703.706	114.513	0.076	-
3439	0520-00048-V7	EQT00000000028	L212	EG-2	467736.549	3335301.102	2.016E-01	1.000	0.000	0.001	1.000	-
3439	0520-00048-V7	RLP00000000037	L213	1-09	467764.957	3335300.465	5.216E+01	60.655	374.817	28.042	2.438	-
1251	0520-00001-V20	EQT00000000111	L214	8-90	467079.078	3336138.691	2.423E-01	15.545	418.706	20.117	0.914	-
37103	0560-00096-09	EQT00000000039	L215	PE-04	467295.526	3321918.256	2.563E-01	2.438	672.039	8.809	0.076	-
37103	0560-00096-09	EQT00000000040	L216	HT-02	467295.526	3321918.256	5.178E-03	7.620	449.817	0.073	0.204	-
37103	0560-00096-09	EQT00000000043	L217	CE-09	467295.526	3321918.256	3.472E-01	2.134	727.594	11.613	0.253	-
1251	0520-00001-V20	EQT00000000027	L218	11-01	467118.517	3336124.167	2.665E-01	35.662	1088.706	6.462	0.762	-
1251	0520-00001-V20	EQT00000000072	L219	4-78	467138.023	3336110.036	4.846E-01	26.518	449.817	20.117	0.914	-
1251	0520-00001-V20	EQT00000000121	L220	1-06	467129.000	3336120.000	2.746E-01	15.240	1088.706	3.901	1.524	-
1251	0520-00001-V20	EQT00000000025	L221	10-01	467142.562	3336114.122	3.198E-01	44.501	1088.706	3.231	0.914	-
1251	0520-00001-V20	EQT00000000044	L222	2-91	467132.010	3336128.005	4.916E-01	26.518	347.039	25.268	0.914	-
1251	0520-00001-V20	EQT00000000122	L223	2-06	467209.980	3336084.998	2.585E-01	22.860	1088.706	7.132	1.524	-
1251	0520-00001-V20	EQT00000000105	L224	7-73	467186.895	3336126.179	5.138E+00	60.655	560.928	11.918	1.524	-
1251	0520-00001-V20	EQT00000000021	L225	1-93	467208.000	3336130.999	3.978E-01	26.518	347.039	27.737	0.914	-

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AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1251	0520-00001-V20	EQT00000000192	L226	1-19	467268.800	3336143.443	8.322E-01	12.192	435.928	16.459	1.524	-
1251	0520-00001-V20	EQT00000000193	L227	1-21	467268.800	3336143.443	8.130E-01	30.480	427.039	14.051	1.067	-
37103	0560-00096-09	EQT00000000004	L228	16-98-HT-BS	467100.000	3321500.000	5.178E-03	7.620	449.817	0.073	0.204	-
37103	0560-00096-09	EQT00000000023	L229	PE-03	467100.000	3321500.000	8.342E-02	2.438	672.039	8.809	0.076	-
37103	0560-00096-09	EQT00000000031	L230	GR-01	467100.000	3321500.000	1.036E-02	6.096	449.817	1.524	0.152	-
37103	0560-00096-09	EQT00000000033	L231	HT-01	467100.000	3321500.000	5.178E-03	7.620	449.817	0.073	0.204	-
37103	0560-00096-09	EQT00000000036	L232	CE-06	467100.000	3321500.000	2.626E-01	2.134	727.594	11.613	0.253	-
37103	0560-00096-09	EQT00000000037	L233	CE-07	467100.000	3321500.000	4.611E-01	2.134	727.594	11.613	0.253	-
43304	0520-00206-08	EQT00000000023	L234	BO-101	466948.496	3336553.855	1.654E-01	6.096	505.372	8.534	0.610	-
1251	0520-00001-V20	EQT00000000045	L235	2-93	467207.637	3336300.093	3.877E-01	24.384	422.039	24.750	0.914	-
3585	0520-00050-V18	EQT00000000017	L236	H-103	469128.782	3333568.542	1.575E-01	4.572	497.039	13.411	0.610	-
3585	0520-00050-V18	EQT00000000070	L237	P-049	469077.835	3333673.846	7.560E-02	1.524	699.817	0.001	0.076	-
3585	0520-00050-V18	EQT00000000072	L238	C-55	469135.905	3333566.971	1.008E-01	1.524	699.817	0.001	0.076	-
3585	0520-00050-V18	EQT00000000020	L239	H-205	469128.841	3333589.596	1.134E-01	26.975	560.928	6.309	0.610	-
3585	0520-00050-V18	EQT00000000021	L240	H-501	469128.841	3333589.596	7.332E+00	53.340	533.150	7.620	2.438	-
3585	0520-00050-V18	EQT00000000051	L241	H-701	469128.841	3333589.596	9.034E-01	30.480	667.594	3.048	1.524	-
3585	0520-00050-V18	EQT00000000071	L242	P-050	469050.046	3333758.917	7.560E-02	1.524	699.817	0.001	0.076	-
3585	0520-00050-V18	EQT00000000018	L243	H-201	469126.961	3333606.223	4.448E-01	20.117	389.817	5.480	1.585	-
3585	0520-00050-V18	EQT00000000019	L244	H-204	469127.054	3333639.467	1.663E+00	41.758	527.594	3.200	1.585	-
3585	0520-00050-V18	EQT00000000007	L245	32-G-3201	469155.810	3333589.520	1.840E+00	6.096	533.150	2.353	0.305	-
3585	0520-00050-V18	EQT00000000008	L246	50-G-5001	469155.810	3333589.520	8.114E+00	6.096	533.150	65.038	0.305	-
3585	0520-00050-V18	EQT00000000009	L247	50-G-5002	469155.810	3333589.520	8.114E+00	6.096	533.150	65.038	0.305	-
1251	0520-00001-V20	EQT00000000155	L248	1-14	467411.738	3336186.789	3.780E-01	2.387	748.150	102.718	0.128	-
1251	0520-00001-V20	EQT00000000156	L249	2-14	467411.738	3336186.789	1.840E+00	3.048	808.150	140.818	0.128	-
1251	0520-00001-V20	EQT00000000157	L250	3-14	467411.738	3336186.789	1.512E-01	2.134	834.261	46.634	0.088	-
1251	0520-00001-V20	EQT00000000158	L251	4-14	467411.738	3336186.789	5.544E-01	2.286	727.594	61.570	0.140	-
1251	0520-00001-V20	EQT00000000159	L252	5-14	467411.738	3336186.789	5.040E-02	1.036	755.372	20.726	0.064	-
1251	0520-00001-V20	EQT00000000160	L253	6-14	467411.738	3336186.789	1.840E+00	2.438	808.150	140.818	0.128	-
1251	0520-00001-V20	EQT00000000161	L254	7-14	467411.738	3336186.789	1.663E+00	2.652	727.594	175.870	0.152	-
1251	0520-00001-V20	EQT00000000162	L255	8-14	467411.738	3336186.789	1.613E+00	2.377	727.594	79.858	0.116	-
1251	0520-00001-V20	EQT00000000163	L256	9-14	467411.738	3336186.789	1.663E+00	2.438	744.261	106.070	0.128	-
1251	0520-00001-V20	EQT00000000164	L257	10-14	467411.738	3336186.789	4.788E-01	2.134	755.372	165.506	0.088	-
1251	0520-00001-V20	EQT00000000170	L258	16-14	467411.738	3336186.789	2.520E-02	0.305	807.594	2025.701	0.024	-
1251	0520-00001-V20	EQT00000000171	L259	17-14	467411.738	3336186.789	2.520E-02	0.305	807.594	2025.701	0.024	-
1251	0520-00001-V20	EQT00000000172	L260	18-14	467411.738	3336186.789	1.865E+00	1.920	749.817	199.644	0.128	-
3585	0520-00050-V18	EQT00000000015	L261	F-400	469141.953	3333800.102	4.603E-02	30.480	1255.372	0.061	0.396	-
43304	0520-00206-08	EQT00000000001	L262	BO-100	466967.856	3336747.719	8.285E-02	6.096	505.372	8.534	0.610	-
27518	2461-V7	EQT00000000003	L263	02-96	465676.120	3337928.073	8.918E-03	38.100	1144.261	4.322	0.558	-
3585	0520-00050-V18	EQT00000000059	L264	P-174	469269.800	3333899.670	1.462E+00	2.591	699.817	0.001	0.101	-
27518	2461-V7	EQT00000000002	L265	01-96	465676.068	3338003.869	3.708E-01	30.480	1144.261	11.046	0.357	-
6164	0520-00145-V16	EQT00000000035	L266	30-94	465729.312	3338096.454	1.873E-01	9.144	422.039	19.995	0.792	-
3585	0520-00050-V18	CON00000000003	L267	MVCU	469552.928	3333725.155	2.872E-01	15.240	810.928	10.668	2.591	-
3585	0520-00050-V18	EQT00000000058	L268	EMERG	469552.928	3333725.155	3.780E-01	1.524	699.817	0.001	0.076	-
3585	0520-00050-V18	EQT00000000060	L269	P-402	469552.928	3333725.155	1.260E-01	1.524	699.817	0.001	0.076	-
3585	0520-00050-V18	EQT00000000061	L270	Bz-ThOx	469552.928	3333725.155	3.078E-02	7.620	1088.706	11.162	0.305	-
3585	0520-00050-V18	EQT00000000063	L271	H-501A	469552.928	3333725.155	1.792E+00	52.426	627.594	10.506	1.777	-
3585	0520-00050-V18	EQT00000000064	L272	H-901	469552.928	3333725.155	8.341E-01	48.463	610.928	9.367	1.372	-
18070	0520-00146-V6	EQT00000000016	L273	20-90	465514.240	3338331.700	1.987E+00	4.572	755.372	0.396	0.134	-
8372	0520-00088-06	EQT00000000023	L274	TKCLEAN	467901.781	3336346.356	1.352E-02	1.000	0.000	0.001	1.000	-
8372	0520-00088-06	EQT00000000026	L275	EFP	467901.781	3336346.356	5.544E-01	1.000	0.000	0.001	1.000	-
8372	0520-00088-06	EQT00000000027	L276	EG	467901.781	3336346.356	2.520E-02	1.000	0.000	0.001	1.000	-
18070	0520-00146-V6	EQT00000000007	L277	4-90	465495.240	3338430.600	1.115E+00	3.048	855.372	75.590	0.101	-
176987	0520-00445-00	EQT00000000001	L278	3-11-GR-BS	455207.860	3339284.276	6.616E-03	3.048	533.150	5.791	0.152	-
176987	0520-00445-00	EQT00000000004	L279	6-11-ICE-ES	455207.860	3339284.276	5.092E-01	3.048	810.928	16.429	0.152	-
176987	0520-00445-00	EQT00000000015	L280	12-11-F	455207.860	3339284.276	3.653E-02	4.572	1088.706	207.874	0.061	-
18070	0520-00146-V6	EQT00000000006	L281	1-97	465635.880	3338356.100	2.177E+00	22.860	438.706	6.340	1.676	-

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18070	0520-00146-V6	EQT00000000005	L282	3-90	465644.870	3338359.000	1.998E+00	22.860	429.261	16.642	1.448	-
6164	0520-00145-V16	EQT00000000053	L283	WPT35-98	465347.685	3338594.095	1.272E-01	7.620	324.817	0.305	1.524	-
6164	0520-00145-V16	EQT00000000043	L284	WPT6-96	465210.285	3338680.964	2.335E+00	30.480	441.483	19.873	1.402	-
6164	0520-00145-V16	EQT00000000044	L285	WPT7-96	465210.302	3338686.505	2.335E+00	30.480	441.483	19.873	1.402	-
18070	0520-00146-V6	EQT00000000004	L286	2-90	465594.400	3338454.300	7.045E-01	39.014	435.928	3.932	1.905	-
18070	0520-00146-V6	EQT00000000003	L287	1-90	465590.200	3338459.000	2.885E-01	41.148	430.372	4.450	1.219	-
6164	0520-00145-V16	EQT00000000042	L288	WPT5-96	465204.557	3338696.496	2.029E+00	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000015	L289	EGN-2	470532.799	3331575.285	7.566E-02	7.001	848.150	49.122	0.600	-
188813	0520-00476-V1	EQT00000000014	L290	EGN-1	470532.533	3331584.151	7.566E-02	7.001	848.150	49.122	0.600	-
188813	0520-00476-V1	EQT00000000001	L291	F-101	470570.964	3331437.222	2.084E+00	55.001	441.483	19.154	4.877	-
6164	0520-00145-V16	EQT00000000040	L292	WPT3-96	465204.687	3338737.497	2.029E+00	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000009	L293	F-341A	470573.430	3331566.533	4.959E-01	55.001	571.483	37.402	1.999	-
18070	0520-00146-V6	EQT00000000015	L294	17-90	465528.190	3338566.200	7.767E-02	60.655	0.000	0.001	0.610	-
6164	0520-00145-V16	EQT00000000038	L295	WPT1-96	465203.855	3338778.501	2.029E+00	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000010	L296	F-341B	470597.514	3331566.469	4.959E-01	55.001	571.483	37.402	1.999	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for NO_2 Annual. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	EQT00000000036	L297	F-103	470614.294	3331536.837	5.457E-01	64.999	433.150	5.483	3.840	
188813	0520-00476-V1	EQT00000000048	L298	F-343B	470629.222	3331607.273	1.008E+01	64.999	404.817	23.037	2.499	
188813	0520-00476-V1	EQT00000000017	L299	FPE-2	470617.087	3331680.885	6.616E-03	3.499	848.150	27.508	0.299	-
185639	0520-00481-V0	EQT00000000023	L300	P-0803A	470844.700	3330600.300	1.058E+00	6.096	725.928	28.926	0.305	-
185639	0520-00481-V0	EQT00000000024	L301	P-0803B	470846.460	3330600.829	1.058E+00	6.096	725.928	28.926	0.305	-
188813	0520-00476-V1	EQT00000000016	L302	FPE-1	470632.404	3331680.844	6.616E-03	3.499	848.150	27.508	0.299	-
188813	0520-00476-V1	EQT00000000035	L303	F-102	470689.787	3331523.449	1.193E+00	64.999	441.483	37.234	3.499	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for NO_2 Annual. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	EQT00000000037	L304	F-342	470682.102	3331567.794	7.183E-01	64.999	571.483	12.213	3.499	
188813	0520-00476-V1	EQT00000000038	L305	F-343A	470677.643	3331593.625	6.818E-02	55.001	405.372	23.037	2.499	
6164	0520-00145-V16	EQT00000000041	L306	WPT4-96	465184.017	3338898.242	2.029E+00	43.282	474.817	11.278	2.134	-
118397	0520-00313-02	EQT00000000022	L307	ENG-2	454169.000	3339085.999	1.893E-01	2.743	810.928	0.055	0.101	-
6164	0520-00145-V16	EQT00000000029	L308	9-89	465533.922	3338728.701	2.423E+00	4.572	755.372	3.048	0.101	-
6164	0520-00145-V16	EQT00000000039	L309	WPT2-96	465204.361	3338938.070	2.029E+00	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000037	L310	9-01	465694.562	3338683.872	1.692E-01	13.716	929.817	36.576	2.438	-
118397	0520-00313-02	EQT00000000008	L311	HEATER-2	454164.445	3339165.471	2.589E-03	3.048	0.000	0.001	0.152	-
118397	0520-00313-02	EQT00000000012	L312	ENG-1	454164.445	3339165.471	2.445E-01	2.438	1005.372	41.395	0.076	-
17269	0520-00179-02	EQT00000000039	L313	EP-6-95-01	467200.000	3337600.000	4.948E-02	10.912	552.594	0.091	0.549	-
6164	0520-00145-V16	EQT00000000047	L314	WPT10-96	465410.294	3338908.608	1.405E+00	4.572	755.372	0.305	0.101	-
6164	0520-00145-V16	EQT00000000030	L315	10-89	465625.560	3338784.928	1.138E+00	60.655	324.817	0.305	0.914	-
6164	0520-00145-V16	EQT00000000105	L316	WPT1-10	465417.984	3338966.095	1.101E+00	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000110	L317	1-13	465417.984	3338966.095	3.213E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000111	L318	WPT1-13	465417.984	3338966.095	4.309E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000112	L319	WPT1-14	465417.984	3338966.095	1.043E+00	1.000	0.000	0.001	1.000	-
6164	0520-00145-V16	EQT00000000117	L320	1-18	465417.984	3338966.095	2.250E-01	12.192	0.000	0.001	2.286	-
6164	0520-00145-V16	EQT00000000118	L321	7-18	465417.984	3338966.095	2.520E-01	3.048	0.000	0.001	7.620	-
6164	0520-00145-V16	EQT00000000128	L322	2-20	465417.984	3338966.095	6.500E-02	1.000	0.000	0.001	1.000	-
6164	0520-00145-V16	EQT00000000129	L323	3-20	465417.984	3338966.095	8.167E-02	1.000	0.000	0.001	1.000	-
6164	0520-00145-V16	EQT00000000130	L324	WPT1-19	465417.984	3338966.095	3.276E-01	1.000	0.000	0.001	1.000	-

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6164	0520-00145-V16	EQT00000000131	L325	4-20	465417.984	3338966.095	8.167E-02	1.000	0.000	0.001	1.000	-
6164	Regper - Boiler	EQT00000000133	L326	WPT1-21	465417.984	3338966.095	4.603E-03	1.000	0.000	0.001	1.000	-
6164	0520-00145-V16	EQT00000000048	L327	WPT11-96	465730.481	3338779.059	1.554E+00	91.440	1255.372	19.995	1.067	-
682	0520-00119-V7	EQT00000000019	L328	Eng-1	467327.010	3337582.949	4.536E-01	1.000	0.000	0.001	1.000	-
682	0520-00119-V7	EQT00000000020	L329	MDPE #1	467327.010	3337582.949	5.753E-04	1.000	0.000	0.001	1.000	-
682	0520-00119-V7	EQT00000000021	L330	MDPE #2	467327.010	3337582.949	5.753E-04	1.000	0.000	0.001	1.000	-
6164	0520-00145-V16	EQT00000000017	L331	31-85	465761.362	3338802.234	2.655E+00	30.480	477.594	18.288	1.402	-
6164	0520-00145-V16	EQT00000000036	L332	1-95	465739.343	3338842.195	2.066E+00	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000023	L333	1-89F	465766.324	3338849.868	5.363E+00	43.586	388.706	14.630	1.524	-
188813	0520-00476-V1	EQT00000000012	L334	F-461	470921.531	3331725.065	1.812E-02	64.999	1273.150	1.859	0.213	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for NO_2 Annual. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	EQT00000000039	L335	F-462	470921.531	3331725.065	1.323E-02	64.999	1273.150	1.859	0.213	-
188813	0520-00476-V1	EQT00000000040	L336	F-463	470921.531	3331725.065	1.496E-02	64.999	1273.150	1.859	0.213	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for NO_2 Annual. Therefore the emission sources from option 1 and 3 were excluded.
6164	0520-00145-V16	EQT00000000028	L337	8-89	465567.500	3338997.872	1.454E+00	4.572	755.372	0.914	0.101	-
185639	0520-00481-V0	EQT00000000028	L338	RH-1001	471258.590	3330498.990	3.251E-02	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000001	L339	GT-1301A	471264.700	3330518.580	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000002	L340	GT-1301B	471264.220	3330550.640	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000013	L341	H-1603	471280.050	3330449.269	2.995E-01	54.864	422.039	20.361	1.219	-
6164	0520-00145-V16	EQT00000000024	L342	2-89	465761.974	3338998.371	1.865E+00	30.480	422.039	18.288	1.402	-
185639	0520-00481-V0	EQT00000000025	L343	P-0801A	471324.170	3330356.499	3.024E-01	6.096	838.150	29.688	0.204	-
185639	0520-00481-V0	EQT00000000026	L344	P-0801B	471326.130	3330356.570	3.024E-01	6.096	838.150	29.688	0.204	-
185639	0520-00481-V0	EQT00000000009	L345	B-1101	471296.120	3330589.510	7.105E-02	15.240	394.261	9.653	0.914	-
6164	0520-00145-V16	EQT00000000022	L346	1-89E	465766.912	3339038.249	5.363E+00	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000021	L347	1-89D	465766.974	3339058.195	5.363E+00	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000020	L348	1-89C	465767.005	3339068.168	5.363E+00	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000019	L349	1-89B	465767.036	3339078.141	5.363E+00	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000018	L350	1-89A	465767.071	3339089.222	5.363E+00	43.586	388.706	14.630	1.524	-
185639	0520-00481-V0	EQT00000000029	L351	RH-2001	471358.290	3330500.380	3.251E-02	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000003	L352	GT-2301A	471364.640	3330520.200	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000004	L353	GT-2301B	471364.080	3330552.169	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000014	L354	H-2603	471379.500	3330450.970	2.995E-01	54.864	422.039	20.361	1.219	-
185639	0520-00481-V0	EQT00000000010	L355	B-2101	471396.280	3330591.590	7.105E-02	15.240	394.261	9.653	0.914	-
31843	0560-00149-02	EQT00000000001	L356	01-97-HT-BS	458948.719	3316922.399	5.178E-03	7.620	449.817	1.320	0.253	-
31843	0560-00149-02	EQT00000000002	L357	10-97-ICE-ES	458948.719	3316922.399	1.671E-01	3.048	699.817	13.564	0.101	-
31843	0560-00149-02	EQT00000000003	L358	21-97-ICE-ES	458948.719	3316922.399	1.113E-01	3.048	699.817	8.992	0.101	-
31843	0560-00149-02	EQT00000000013	L359	PE-01	458948.719	3316922.399	6.415E-02	2.134	699.817	5.090	0.076	-
185639	0520-00481-V0	EQT00000000030	L360	RH-3001	471458.250	3330502.190	3.251E-02	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000006	L361	GT-3301B	471463.800	3330553.800	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000015	L362	H-3603	471479.580	3330452.459	2.995E-01	54.864	422.039	20.361	1.219	-
185639	0520-00481-V0	EQT00000000021	L363	A-0721	471465.740	3330723.130	2.380E+01	32.918	0.000	0.001	0.457	-
185639	0520-00481-V0	EQT00000000022	L364	A-0722	471466.530	3330722.240	1.292E+01	32.918	0.000	0.001	0.610	-

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185639	0520-00481-V0	EQT00000000011	L365	B-3101	471495.730	3330592.980	7.105E-02	15.240	394.261	9.653	0.914	-
185639	0520-00481-V0	EQT00000000031	L366	RH-4001	471557.950	3330503.660	3.251E-02	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000007	L367	GT-4301A	471564.220	3330523.460	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000008	L368	GT-4301B	471563.650	3330555.340	2.399E+00	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000016	L369	H-4603	471579.470	3330454.200	2.995E-01	54.864	422.039	20.361	1.219	-
133	0520-00011-V7	EQT00000000088	L370	6-16	471438.000	3331348.000	1.139E+00	2.591	885.372	23.284	0.101	-
188813	0520-00476-V1	SCN00000000001	L371	F-101	471119.443	3332619.680	3.416E+01	1.000	0.000	0.001	1.000	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for NO_2 Annual. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	SCN00000000002	L372	F-341A	471119.443	3332619.680	8.260E+00	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000003	L373	F-341B	471119.443	3332619.680	8.260E+00	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000004	L374	F-461	471119.443	3332619.680	3.237E+01	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000005	L375	F-461	471119.443	3332619.680	4.988E-01	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000006	L376	F-102	471119.443	3332619.680	1.957E+01	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000007	L377	F-342	471119.443	3332619.680	1.197E+01	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000008	L378	F-462	471119.443	3332619.680	7.484E+01	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000009	L379	F-462	471119.443	3332619.680	4.200E-01	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000010	L380	F-103	471119.443	3332619.680	8.960E+00	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000011	L381	F-343A	471119.443	3332619.680	1.155E+00	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000012	L382	F-463	471119.443	3332619.680	9.209E+01	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000013	L383	F-463	471119.443	3332619.680	4.200E-01	1.000	0.000	0.001	1.000	
133	0520-00011-V7	EQT00000000086	L384	6-14	471449.000	3331406.000	3.125E-01	10.769	888.150	45.406	0.052	-
185639	0520-00481-V0	EQT00000000012	L385	B-4101	471596.120	3330594.370	7.105E-02	15.240	394.261	9.653	0.914	-
133	0520-00011-V7	EQT00000000087	L386	6-15	471393.000	3331700.000	9.324E-01	3.048	873.150	59.506	0.152	-
133	0520-00011-V7	EQT00000000018	L387	2-02	471452.319	3331455.733	1.418E+01	53.035	1366.483	19.812	4.267	-
133	0520-00011-V7	EQT00000000051	L388	5-01	471522.749	3331495.442	3.276E+00	38.252	337.039	9.754	2.438	-
133	0520-00011-V7	EQT00000000022	L389	3-07	471582.821	3331254.826	2.160E-01	9.144	366.483	20.117	1.372	-
185639	0520-00481-V0	EQT00000000027	L390	EG-0001	471713.200	3330448.860	1.789E+00	6.096	749.817	29.352	0.405	-
1250	2920-V4	EQT00000000242	L391	3(XXX)2	468162.045	3337666.043	2.016E+00	64.618	477.594	12.427	2.210	-
133	0520-00011-V7	EQT00000000090	L392	5-01b	471527.000	3331603.000	3.276E+00	38.252	311.483	16.764	2.134	-
34017	1260-00118-V2	ARE00000000005	L393	TEST-01	471764.615	3330241.099	2.100E+00	1.000	0.000	0.001	1.000	-
34017	1260-00118-V2	EQT00000000003	L394	FU-01	471764.615	3330241.099	1.440E-01	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	FUG00000000010	L395	5-13	471571.827	3331474.261	2.301E-03	1.000	0.000	0.001	1.000	-
185639	0520-00481-V0	EQT00000000005	L396	GT-3301A	471764.510	3330521.910	2.399E+00	64.922	458.150	26.021	2.743	-
133	0520-00011-V7	EQT00000000030	L397	4-02	471674.044	3331138.239	1.208E-01	27.432	394.261	23.439	0.792	-
37119	2338-V4	EQT00000000011	L398	PG-1-94	466839.934	3338867.958	5.466E-03	10.668	0.000	0.001	0.152	-
37119	2338-V4	EQT00000000012	L399	PG-6-94	466839.934	3338867.958	1.008E+00	2.438	659.261	0.001	0.101	-
37119	2338-V4	EQT00000000013	L400	PG-7-94	466839.934	3338867.958	1.008E+00	2.438	659.261	0.001	0.101	-
133	0520-00011-V7	EQT00000000050	L401	4-24	471661.107	3331352.138	1.079E-01	9.144	588.706	10.363	0.457	-
133	0520-00011-V7	EQT00000000092	L402	4-22	471661.107	3331352.138	3.682E-02	9.144	588.706	10.363	0.457	-
133	0520-00011-V7	EQT00000000093	L403	4-23	471661.107	3331352.138	3.682E-02	9.144	588.706	10.363	0.457	-
1250	3010-V6	EQT00000000352	L404	3(XXIX)3	466425.104	3339281.999	3.365E+01	91.440	1273.150	20.117	3.505	-
212290	0520-00509-V0	EQT00000000010	L405	3101B	471816.759	3331339.438	8.774E-02	60.960	1273.150	20.117	0.113	-
1250	PSD-LA-545(M-1)	EQT00000000293	L406	3(XX-B)1	468355.700	3337942.515	9.878E-01	45.720	922.039	21.196	1.753	-
1250	2796-V14	EQT00000000066	L407	3(IX)38	468512.000	3337851.999	2.149E-01	15.240	1273.150	20.001	1.430	-
212290	0520-00509-V0	EQT00000000031	L408	C702JB	471824.844	3332126.179	7.105E-01	64.999	688.706	18.136	3.706	-
3351	0520-00098-V9	EQT00000000020	L409	E-21	472030.000	3331228.000	4.401E-02	6.096	394.261	6.096	0.396	-
212290	0520-00509-V0	EQT00000000030	L410	C702JA	471823.859	3332155.436	7.105E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000025	L411	C701JB	471824.873	3332213.055	7.039E-01	64.999	466.483	28.834	3.048	-
212290	0520-00509-V0	EQT00000000024	L412	C701JA	471826.001	3332239.537	7.039E-01	64.999	466.483	28.834	3.048	-
3351	0520-00098-V9	EQT00000000042	L413	VSH-1	472000.000	3331537.000	3.768E-02	10.058	422.039	13.801	0.253	-
3351	0520-00098-V9	EQT00000000013	L414	E-14	472046.000	3331333.000	6.175E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000014	L415	E-15	472046.000	3331333.000	6.175E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000015	L416	E-16	472046.000	3331333.000	6.175E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000016	L417	E-17	472046.000	3331336.000	6.555E-01	13.106	288.706	8.230	0.762	-

NO_2 Annual NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3351	0520-00098-V9	EQT00000000017	L418	E-18	472046.000	3331339.000	6.555E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000018	L419	E-19	472046.000	3331341.999	6.555E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000019	L420	E-20	472046.000	3331345.000	6.555E-01	13.106	288.706	8.230	0.762	-
1250	3010-V6	EQT00000000538	L421	PCD	466995.531	3339257.773	1.260E+00	1.000	0.000	0.001	1.000	Based on the Title V Permit Modification submitted to LDEQ on July 18, 2019. The portable thermal oxidizer/vapor combustor (PTO/VC) is only used during turnaround or other maintenance activities. The PTO/VC will be brought onsite on an as-needed basis. Therefore, this source was excluded.
1250	3010-V6	EQT00000000539	L422	PF	466995.531	3339257.773	3.367E+01	1.000	0.000	0.001	1.000	Based on the Title V Permit Modification submitted to LDEQ on July 18, 2019. The portable flare is only used during turnaround or other maintenance activities when one or more flares are down. Therefore, this source was excluded.
204624	7777-00902-ACI-00	EQT00000000001	L423	ACI	471876.712	3332180.012	1.934E+00	1.000	0.000	0.001	1.000	-
1250	PSD-LA-545(M-1)	EQT00000000293	L424	3(XX-B)1	468356.000	3338155.000	4.954E-01	45.720	922.039	21.196	1.753	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L406. Therefore, this source was excluded from this modeling analysis.
1250	2920-V4	EQT00000000241	L425	3(XXVIII)1	468233.045	3338277.968	7.827E+00	45.720	435.928	9.616	2.438	-
1250	PSD-LA-545(M-1)	EQT00000000295	L426	3(VIII-A)2	468375.060	3338145.690	2.835E-01	9.144	477.594	5.066	0.762	-
1250	PSD-LA-545(M-1)	EQT00000000294	L427	3(VIII-A)3	468380.373	3338151.770	3.087E-01	9.144	588.706	10.775	0.610	-
1250	PSD-LA-545(M-1)	EQT00000000295	L428	3(VIII-A)2	468374.000	3338165.000	1.424E-01	9.144	477.594	5.066	0.762	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L426. Therefore, this source was excluded from this modeling analysis.
3351	0520-00098-V9	EQT00000000004	L429	E-3	472200.000	3330900.000	6.185E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000005	L430	E-4	472200.000	3330900.000	6.185E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000006	L431	E-5	472200.000	3330900.000	6.185E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000007	L432	E-6	472200.000	3330900.000	6.185E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000008	L433	E-7	472200.000	3330900.000	6.185E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000009	L434	E-8	472200.000	3330900.000	6.185E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000010	L435	E-9	472200.000	3330900.000	6.185E-01	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000011	L436	E-10	472200.000	3330900.000	4.401E-02	6.096	394.261	6.096	0.396	-
3351	0520-00098-V9	EQT00000000012	L437	E-11	472200.000	3330900.000	4.401E-02	6.096	394.261	6.096	0.396	-
3351	0520-00098-V9	EQT00000000023	L438	E-1	472200.000	3330900.000	5.981E+00	15.240	741.483	18.288	2.896	-
3351	0520-00098-V9	EQT00000000024	L439	E-22	472200.000	3330900.000	7.782E-01	51.816	450.928	6.096	2.438	-
3351	0520-00098-V9	EQT00000000025	L440	E-23	472200.000	3330900.000	7.782E-01	51.816	450.928	6.096	2.438	-
3351	0520-00098-V9	EQT00000000026	L441	EG-1	472200.000	3330900.000	2.243E+00	3.048	422.039	0.001	0.152	-
3351	0520-00098-V9	EQT00000000027	L442	EG-2	472200.000	3330900.000	1.940E+00	3.048	422.039	0.001	0.152	-
3351	0520-00098-V9	EQT00000000028	L443	SEG	472200.000	3330900.000	4.032E-01	2.438	422.039	0.001	0.152	-
3351	0520-00098-V9	EQT00000000088	L444	FL-1	472200.043	3330899.982	3.465E+00	18.288	1477.594	0.001	0.457	-
3351	0520-00098-V9	EQT00000000030	L445	FWP-1	472200.428	3330899.760	8.064E-01	7.925	728.150	58.988	0.152	-
3351	0520-00098-V9	EQT00000000031	L446	FWP-2	472200.428	3330899.760	8.064E-01	7.925	728.150	58.988	0.152	-
3351	0520-00098-V9	EQT00000000032	L447	FWP-3	472200.428	3330899.760	8.064E-01	7.925	728.150	58.988	0.152	-
3351	0520-00098-V9	EQT00000000033	L448	FWP-4	472200.428	3330899.760	8.064E-01	7.925	728.150	58.988	0.152	-
3351	0520-00098-V9	EQT00000000034	L449	FWP-5	472200.428	3330899.760	8.064E-01	7.925	728.150	58.988	0.152	-
3351	0520-00098-V9	EQT00000000035	L450	FWP-6	472200.428	3330899.760	8.064E-01	7.925	728.150	58.988	0.152	-
3351	0520-00098-V9	EQT00000000036	L451	FWP-7	472200.428	3330899.760	8.064E-01	7.925	728.150	58.988	0.152	-
3351	0520-00098-V9	EQT00000000037	L452	FWP-8	472200.428	3330899.760	8.064E-01	7.925	728.150	58.988	0.152	-
3351	0520-00098-V9	EQT00000000038	L453	FWP-9	472200.428	3330899.760	8.064E-01	7.925	728.150	58.988	0.152	-
3351	0520-00098-V9	EQT00000000039	L454	FWP-10	472200.428	3330899.760	8.064E-01	7.925	728.150	58.988	0.152	-

NO_2 Annual NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3351	0520-00098-V9	EQT00000000040	L455	FWP-11	472200.428	3330899.760	8.064E-01	7.925	728.150	58.988	0.152	-
212290	0520-00509-V0	EQT00000000011	L456	4102JA	471993.660	3331991.334	5.040E-02	15.240	810.928	30.949	0.305	-
212290	0520-00509-V0	EQT00000000012	L457	4102JB	472011.875	3331994.279	5.040E-02	15.240	810.928	30.949	0.305	-
212290	0520-00509-V0	EQT00000000029	L458	B702JB	471987.553	3332127.647	7.105E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000028	L459	B702JA	471986.571	3332158.123	7.105E-01	64.999	688.706	18.136	3.706	-
1250	3009-V6	EQT00000000501	L460	GA1016A/B	467201.065	3339256.602	2.974E+00	1.000	0.000	0.001	1.000	-
212290	0520-00509-V0	EQT00000000013	L461	4102JC	472031.612	3331989.686	5.040E-02	15.240	810.928	30.949	0.305	-
1250	PSD-LA-545(M-1)	EQT00000000294	L462	3(VIII-A)3	468398.000	3338250.999	1.575E-01	9.144	588.706	10.775	0.610	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L427. Therefore, this source was excluded from this modeling analysis.
87773	0520-00247-03	EQT00000000024	L463	20-16	472060.579	3331902.514	6.041E-03	3.658	699.817	0.113	0.253	-
87773	0520-00247-03	EQT00000000025	L464	20-19	472060.579	3331902.514	6.041E-03	3.658	699.817	0.113	0.253	-
87773	0520-00247-03	EQT00000000028	L465	20-38	472060.579	3331902.514	2.891E-01	1.000	859.261	0.001	1.000	-
165504	0520-00420-01	EQT00000000004	L466	2009-04	472063.277	3331902.507	1.528E-01	3.048	477.594	3.533	0.204	-
165504	0520-00420-01	EQT00000000006	L467	2009-06	472063.277	3331902.507	3.855E-01	3.048	783.150	14.326	0.101	-
165504	0520-00420-01	EQT00000000007	L468	2009-07	472063.277	3331902.507	1.208E-02	3.048	477.594	3.533	0.204	-
165504	0520-00420-01	EQT00000000009	L469	2018-10	472063.277	3331902.507	1.528E-01	9.144	1273.150	0.001	0.076	-
212290	0520-00509-V0	EQT00000000023	L470	B701JB	471987.581	3332214.413	7.039E-01	64.999	466.483	28.834	3.048	-
212290	0520-00509-V0	EQT00000000022	L471	B701JA	471989.482	3332241.889	7.039E-01	64.999	466.483	28.834	3.048	-
1250	2930-V7	EQT00000000240	L472	3(XXVI)2	468189.967	3338562.993	4.497E+00	48.768	422.039	7.437	2.286	-
1250	3010-V6	EQT00000000357	L473	3(MISC)GEN	468399.959	3338400.045	2.559E+00	3.658	800.928	187.686	0.101	The stack velocity is calculated based on the stack flow and stack diameter obtained from 3010-V6 permit.
1250	3010-V6	EQT00000000357	L474	3(MISC)GEN	468399.959	3338400.045	1.460E+00	3.048	298.150	187.686	0.091	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L473. Therefore, this source was excluded from this modeling analysis.
1250	3010-V6	EQT00000000412	L475	3(MISC)GEN EMERG	468399.959	3338400.045	1.847E+00	3.658	800.928	187.686	0.101	The stack velocity is calculated based on the stack flow and stack diameter obtained from 3010-V6 permit.
1250	3010-V6	EQT00000000549	L476	432-JG827	468399.959	3338400.045	4.360E+00	3.658	800.928	0.001	0.101	-
1250	2930-V7	EQT00000000239	L477	3(XXVI)1	468189.990	3338637.016	4.497E+00	45.720	422.039	7.437	2.286	-
212290	0520-00509-V0	EQT00000000027	L478	A702JB	472154.003	3332122.571	7.105E-01	64.999	688.706	18.136	3.706	-
1250	2930-V7	EQT00000000540	L479	RNTL-BLR-1	468519.970	3338349.945	1.436E+00	10.973	516.483	12.192	1.219	-
1250	2930-V7	EQT00000000541	L480	RNTL-BLR-2	468519.970	3338349.945	1.436E+00	10.973	516.483	12.192	1.219	-
212290	0520-00509-V0	EQT00000000026	L481	A702JA	472154.078	3332152.157	7.105E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000009	L482	7106B	472079.454	3332469.046	5.063E+00	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000021	L483	A701JB	472154.999	3332211.550	7.039E-01	64.999	466.483	28.834	3.048	-
1250	2920-V4	EQT00000000237	L484	3(XXII)1	468507.957	3338390.980	5.937E+00	60.960	433.150	13.274	2.134	-
212290	0520-00509-V0	EQT00000000020	L485	A701JA	472155.068	3332238.699	7.039E-01	64.999	466.483	28.834	3.048	-
1250	2920-V4	EQT00000000238	L486	3(XXII)2	468499.987	3338432.004	1.047E+01	76.200	416.483	12.713	4.014	-
1250	2920-V4	RLP00000000017	L487	3(XXII)3	468485.020	3338449.999	7.652E-02	41.148	699.817	15.993	0.204	-
1250	2935-V11	EQT00000000525	L488	B101	468615.811	3338365.295	1.059E-01	15.240	1255.372	0.001	1.219	-
1250	2796-V14	EQT00000000534	L489	B-103	469126.956	3337852.998	3.672E+00	15.240	1088.706	4.319	2.743	The stack velocity is calculated based on the stack flow and diameter obtained from 2796-V14 permit.
1250	2796-V14	EQT00000000063	L490	3(IX)34	469141.000	3337856.000	6.184E+00	22.860	1273.150	20.001	1.606	-
1250	2920-V4	EQT00000000230	L491	3(XVIII-A)3	468520.018	3338500.983	1.038E+00	29.962	695.372	6.971	1.728	-
1250	3010-V6	EQT00000000351	L492	3(XXIII)2	468163.099	3338825.919	3.365E+01	67.056	1273.150	20.117	3.505	-
1250	2920-V4	EQT00000000232	L493	3(XVIII-A)2	468520.041	3338508.961	1.062E+00	29.962	672.039	6.907	1.728	-
1250	2920-V4	EQT00000000234	L494	3(XVIII)2	468512.983	3338532.031	1.649E+00	27.889	658.706	9.104	1.295	-
104574	0520-00304-02	EQT00000000001	L495	2-02-GR-BS	451839.733	3339606.280	2.589E-03	3.048	533.150	2.286	0.152	-
104574	0520-00304-02	EQT00000000003	L496	4-02-F	451839.733	3339606.280	1.755E-02	4.572	1088.706	1.829	0.610	-
104574	0520-00304-02	EQT00000000019	L497	24-14-ICE-ES	451839.733	3339606.280	5.092E-01	3.048	810.928	16.429	0.152	-
1250	2920-V4	EQT00000000227	L498	3(X-A)1	468443.027	3338612.017	4.322E-01	19.202	816.483	7.687	1.067	-

NO_2 Annual NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	2920-V4	EQT00000000236	L499	3(XXVII-A)1	468489.983	3338568.997	1.865E-01	30.480	588.706	9.050	0.686	-
1250	2920-V4	EQT00000000228	L500	3(X-A)2	468442.957	3338620.993	6.300E-01	19.202	744.261	10.510	1.067	-
1250	2920-V4	EQT00000000231	L501	3(XVIII-A)4	468620.031	3338494.048	9.693E+00	52.852	616.483	6.203	4.191	-
1250	2920-V4	EQT00000000229	L502	3(XVIII-A)1	468619.997	3338515.989	1.124E+00	30.876	692.594	7.501	1.728	-
1250	2920-V4	EQT00000000225	L503	3(X)4	468517.047	3338639.951	1.409E+00	32.309	624.817	8.099	1.676	-
1250	2920-V4	EQT00000000233	L504	3(XVIII)1	468624.042	3338549.997	1.886E+00	27.889	741.483	7.239	1.448	-
145324	N/A	EQT00000000035	L505	CE-03	470321.903	3321226.118	4.666E-01	1.000	0.000	0.001	1.000	-
1250	2920-V4	EQT00000000235	L506	3(XVIII)3	468623.980	3338561.965	8.127E-01	28.164	644.261	11.019	1.015	-
1250	2920-V4	RLP00000000016	L507	3(XVIII-A)5	468473.956	3338720.968	6.616E-03	12.192	310.928	20.665	0.152	-
212290	0520-00509-V0	EQT00000000005	L508	7105B	472322.141	3332482.062	3.297E-01	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000007	L509	7102B	472322.145	3332483.614	3.740E-03	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000008	L510	7103B	472322.148	3332484.833	3.740E-03	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000006	L511	7101B	472323.490	3332482.059	3.740E-03	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000004	L512	7104B	472324.834	3332480.504	3.740E-03	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000016	L513	6101LC	472380.013	3332281.459	1.789E+00	15.240	655.372	23.716	0.914	-
1244	0520-00007-V9	EQT00000000054	L514	B-100	467950.838	3339196.763	8.069E-01	15.240	422.039	28.392	1.372	-
1244	0520-00007-V9	EQT00000000055	L515	PE-07	467950.838	3339196.763	1.285E+00	7.315	739.261	19.873	0.241	-
1244	0520-00007-V9	EQT00000000056	L516	PE-08	467950.838	3339196.763	1.789E+00	7.315	739.261	19.873	0.241	-
1244	0520-00007-V9	EQT00000000057	L517	PE-09	467950.838	3339196.763	1.260E+00	7.315	739.261	19.873	0.241	-
1244	0520-00007-V9	EQT00000000058	L518	PE-10	467950.838	3339196.763	9.576E-02	1.713	858.150	39.377	0.101	-
1244	0520-00007-V9	EQT00000000059	L519	PE-11	467950.838	3339196.763	9.072E-01	1.881	777.039	75.194	0.101	-
1244	0520-00007-V9	EQT00000000064	L520	RTO	467950.838	3339196.763	1.392E+00	19.507	463.706	498.653	3.658	-
1244	Regper-Eng	EQT00000000066	L521	Eng	467950.838	3339196.763	8.342E-03	1.000	0.000	0.001	1.000	-
1244	0520-00007-V9	EQT00000000067	L522	PE-12	467950.838	3339196.763	7.308E-01	4.572	760.372	33.165	0.241	-
212290	0520-00509-V0	EQT00000000014	L523	6101LA	472381.394	3332294.420	1.789E+00	15.240	655.372	23.716	0.914	-
1250	2920-V4	EQT00000000226	L524	3(X)5	468617.012	3338616.948	9.878E-01	25.908	544.261	5.172	1.728	-
1250	2930-V7	EQT00000000396	L525	3(XXXIII)1A	469041.019	3338209.947	9.450E-01	53.340	505.372	2.195	2.109	-
212290	0520-00509-V0	EQT00000000015	L526	6101LB	472411.353	3332294.345	1.789E+00	15.240	655.372	23.716	0.914	-
1250	2920-V4	EQT00000000224	L527	3(X)6	468632.992	3338650.035	7.990E+00	28.346	477.594	13.378	1.881	-
212290	0520-00509-V0	EQT00000000018	L528	6301C	472392.371	3332407.642	2.635E-01	45.720	560.928	6.096	2.134	-
85234	0520-00232-03	EQT00000000001	L529	Comp-1	472770.767	3330582.965	9.375E-01	7.620	719.817	188.933	0.305	-
85234	0520-00232-03	EQT00000000002	L530	Comp-2	472770.767	3330582.965	9.375E-01	7.620	719.817	188.933	0.305	-
85234	0520-00232-03	EQT00000000003	L531	Comp-3	472770.767	3330582.965	9.375E-01	7.620	719.817	188.933	0.305	-
1250	2920-V4	EQT00000000223	L532	3(X)1	468622.029	3338687.965	4.813E-01	24.384	644.261	9.284	0.914	-
1250	3010-V6	EQT00000000350	L533	3(XXII)4	468405.069	3338904.007	3.365E+01	65.532	1273.150	20.117	3.505	-
212290	0520-00509-V0	EQT00000000002	L534	B201B	472433.730	3332382.606	2.724E-01	30.480	1088.706	13.411	1.737	-
212290	0520-00509-V0	EQT00000000001	L535	A201B	472438.366	3332387.248	2.724E-01	30.480	1088.706	13.411	1.737	-
212290	0520-00509-V0	EQT00000000003	L536	C201B	472448.188	3332385.672	2.724E-01	30.480	1088.706	13.411	1.737	-
1250	3009-V6	EQT00000000502	L537	GA112A/B	467481.496	3339676.857	3.901E-01	1.000	0.000	0.001	1.000	-
212290	0520-00509-V0	SCN00000000001	L538	7106B	472751.818	3331023.597	9.543E+01	106.070	1273.150	20.117	16.871	Based on the Title V Permit No. 0520-00509-V0, it is an alternate operating scenario of EQT00000000009. The emissions from EQT00000000009 are modeled under Model ID: L342. Therefore, this source was excluded.
3351	0520-00098-V9	EQT00000000089	L539	GEN-1	472751.818	3331023.597	5.040E-02	1.576	866.483	53.203	0.064	-
1250	2920-V4	RLP00000000015	L540	3(X)7	468518.008	3338873.985	6.616E-03	12.192	310.928	20.665	0.152	-
1250	3010-V6	EQT00000000521	L541	343B105	468675.890	3338804.164	3.367E+01	67.056	1273.150	20.117	3.505	-
1250	3010-V6	EQT00000000522	L542	343B107	468683.977	3338804.141	3.367E+01	91.440	1273.150	20.117	3.505	-
1250	3010-V6	EQT00000000343	L543	3(IV)1	469139.021	3338377.109	3.365E+01	64.313	1273.150	20.117	3.505	-
1250	2796-V14	EQT00000000064	L544	3(IX)35	469216.000	3338344.000	1.306E+01	30.480	1273.150	20.001	2.737	-
1250	2930-V7	EQT00000000397	L545	3(XXXIII)1B	469416.991	3338210.001	9.450E-01	53.340	505.372	2.347	2.109	-
3766	0520-00057-V5AA	EQT00000000007	L546	LR-01VCU	468471.530	3339149.821	1.620E-01	13.716	1271.483	18.440	2.438	-
1250	2930-V7	EQT00000000398	L547	3(XXXIII)2A	469453.005	3338212.006	1.418E+00	48.768	422.039	7.437	2.286	-
1250	2930-V7	EQT00000000399	L548	3(IIIXXX)2B	469453.968	3338212.003	1.418E+00	53.340	505.372	5.730	2.539	-
1250	2930-V7	EQT00000000256	L549	3(VII-C)2	469085.034	3338591.019	8.751E+00	36.576	727.594	3.353	2.134	-
1250	2930-V7	EQT00000000252	L550	3(III)1	469114.990	3338562.012	4.193E+00	47.244	672.039	2.926	2.134	-

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1250	2930-V7	EQT00000000255	L551	3(VII-C)1	469114.990	3338562.012	7.367E+00	30.480	810.928	2.896	2.438	-
1250	2930-V7	EQT00000000253	L552	3(III)2	469114.993	3338563.010	4.193E+00	46.482	627.594	2.926	2.134	-
1250	2908-V10	EQT00000000034	L553	3(XVI)4	468595.894	3339076.106	4.511E-01	27.432	637.594	3.767	1.448	-
1250	2908-V10	EQT00000000033	L554	3(XVI)3	468594.852	3339081.982	3.112E-01	33.757	555.928	3.770	1.219	-
1250	2930-V7	EQT00000000257	L555	3(XIII)1	469088.028	3338663.039	7.377E+00	60.960	435.928	6.767	1.676	-
1250	2930-V7	EQT00000000251	L556	3(I-D)3	469087.972	3338677.001	8.094E+00	60.960	644.261	6.523	1.676	-
1250	2930-V7	EQT00000000249	L557	3(I-D)1	469070.996	3338699.987	6.917E+00	30.480	810.928	5.944	1.676	-
1250	2930-V7	EQT00000000268	L558	3(K-6)5	469249.017	3338531.051	1.854E+01	28.194	477.594	4.724	2.896	-
1250	2930-V7	EQT00000000266	L559	3(K-6)3	469209.972	3338581.027	8.380E+00	38.100	494.261	24.140	2.362	-
1250	2930-V7	EQT00000000516	L560	B1E	469209.972	3338581.027	3.465E+00	19.812	422.039	16.947	2.134	-
1250	2930-V7	EQT00000000250	L561	3(I-D)2	469088.042	3338702.045	1.075E+00	21.336	688.706	2.134	1.829	-
1250	2930-V7	EQT00000000267	L562	3(K-6)4	469249.007	3338561.968	2.006E+01	28.194	477.594	4.724	2.896	-
1250	2930-V7	EQT00000000265	L563	3(K-6)2	469235.955	3338576.965	5.023E+00	22.647	513.706	13.076	2.438	-
1250	2908-V10	EQT00000000028	L564	3(II)7	468721.059	3339080.070	6.349E+00	34.747	655.372	11.342	2.134	-
1250	2930-V7	EQT00000000264	L565	3(K-6)1	469261.975	3338585.978	5.175E+01	24.536	463.706	12.405	2.743	-
1244	0520-00007-V9	EQT00000000052	L566	B-900	468101.317	3339629.604	8.164E-01	15.240	422.039	28.651	1.372	-
1244	0520-00007-V9	EQT00000000009	L567	96-02d	468100.933	3339630.048	7.313E-01	15.240	409.817	0.238	0.762	-
1250	2908-V10	EQT00000000027	L568	3(II)4	468744.077	3339083.108	1.991E-01	16.764	520.372	5.002	0.838	-
1250	2908-V10	EQT00000000038	L569	3(II)16	468735.090	3339104.963	5.440E+01	70.104	342.039	12.424	2.438	-
1250	2930-V7	EQT00000000272	L570	3(K-6)9	469269.000	3338621.000	8.127E+00	30.480	422.039	14.508	2.362	-
1250	2908-V10	EQT00000000030	L571	3(II)8	468824.070	3339080.110	1.239E+00	34.747	688.150	6.203	2.134	-
1250	2930-V7	EQT00000000271	L572	3(K-6)8	469269.010	3338656.990	2.255E+00	30.480	422.039	14.057	1.917	-
1250	2930-V7	EQT00000000247	L573	3(I)5	469134.986	3338791.006	1.326E+01	30.480	435.928	12.527	2.210	-
1250	2930-V7	EQT00000000248	L574	3(I)6	469118.998	3338822.965	1.406E+01	30.480	435.928	20.086	2.210	-
1250	2908-V10	EQT00000000039	L575	3(II)17	468823.082	3339105.045	5.440E+01	70.104	342.039	12.424	2.438	-
1250	2908-V10	EQT00000000029	L576	3(II)5	468836.165	3339101.573	1.424E-01	16.764	555.372	7.373	0.838	-
1244	0520-00007-V9	EQT00000000011	L577	96-03a	468036.481	3339811.305	2.946E+00	46.634	810.928	0.975	0.457	-
1250	2908-V10	EQT00000000032	L578	3(II)9	468914.951	3339080.184	6.349E+00	34.747	649.261	11.232	2.134	-
1250	2908-V10	EQT00000000031	L579	3(II)6	468921.984	3339081.937	1.991E-01	16.764	479.817	4.615	0.838	-
1250	2908-V10	EQT00000000040	L580	3(II)18	468912.134	3339105.125	5.440E+01	70.104	342.039	12.424	2.438	-
1244	0520-00007-V9	EQT00000000012	L581	96-03b	468016.332	3339867.324	2.946E+00	24.384	810.928	9.022	0.152	-
1250	2930-V7	EQT00000000508	L582	B1D	469283.002	3338805.994	3.465E+00	19.812	422.039	16.947	2.134	-
15430	0560-00160-01	EQT00000000001	L583	1-99	462882.744	3315400.259	1.309E+00	1.000	773.150	0.001	1.000	-
15430	0560-00160-01	EQT00000000002	L584	2-99	462882.744	3315400.259	2.542E-01	1.829	844.261	48.768	0.076	-
5337	0520-00107-V6	EQT00000000018	L585	018	468430.199	3339641.174	3.164E-03	4.877	1273.150	19.995	0.457	-
5337	0520-00107-V6	EQT00000000010	L586	002	468205.363	3339855.471	2.949E-01	30.480	395.372	15.423	1.676	-
1250	2908-V10	EQT00000000322	L587	3(XXXIV)7-103	468957.905	3339221.903	2.520E-01	54.864	588.706	6.407	1.332	-
5337	0520-00107-V6	EQT00000000009	L588	009	468444.914	3339669.722	1.260E-01	4.572	1273.150	19.995	0.457	-
1250	2908-V10	EQT00000000321	L589	3(XXXIV)7-102	468957.939	3339233.982	4.133E-01	54.864	588.706	8.516	1.408	-
1250	2908-V10	EQT00000000320	L590	3(XXXIV)7-101	468957.979	3339248.055	4.133E-01	54.864	588.706	14.042	1.152	-
1250	2930-V7	EQT00000000254	L591	3(VII)1	469685.027	3338555.990	8.303E-01	35.204	577.594	2.438	1.707	-
1250	3010-V6	EQT00000000353	L592	3(XXXIV)10	468966.929	3339281.052	3.365E+01	60.960	1273.150	20.117	3.505	-
5337	0520-00107-V6	EQT00000000027	L593	FWP-1	468471.467	3339764.169	4.032E-01	6.096	672.039	45.720	0.152	-
5337	0520-00107-V6	EQT00000000028	L594	FWP-2	468471.948	3339764.168	4.032E-01	6.096	672.039	45.720	0.152	-
5337	0520-00107-V6	EQT00000000029	L595	FWP-3	468472.237	3339764.167	4.032E-01	6.096	672.039	45.720	0.152	-
5337	0520-00107-V6	EQT00000000030	L596	FWP-4	468472.525	3339764.166	4.032E-01	6.096	672.039	45.720	0.152	-
5337	0520-00107-V6	EQT00000000031	L597	FWP-5	468472.718	3339764.165	4.032E-01	6.096	672.039	45.720	0.152	-
5337	0520-00107-V6	EQT00000000032	L598	FWP-6	468473.007	3339764.165	4.032E-01	6.096	672.039	45.720	0.152	-
42895	0520-00170-V5	EQT00000000003	L599	3	468801.730	3339484.641	2.977E-01	42.672	1273.000	20.000	0.762	LDEQ default flare stack temperature and stack velocity were utilized.
1250	2908-V10	EQT00000000325	L600	3(XXXIV)7-203	468958.078	3339385.130	2.520E-01	54.864	588.706	6.407	1.332	-
42895	0520-00170-V5	EQT00000000001	L601	1	468820.100	3339512.292	6.087E+00	42.672	402.594	16.459	2.743	-
1250	2908-V10	EQT00000000324	L602	3(XXXIV)7-202	468957.823	3339397.099	4.133E-01	54.864	588.706	8.516	1.408	-
1250	2908-V10	EQT00000000323	L603	3(XXXIV)7-201	468957.859	3339410.064	4.133E-01	54.864	588.706	14.042	1.152	-
1250	2908-V10	EQT00000000036	L604	3(XXIX)2	468918.008	3339479.435	6.489E-01	37.795	577.594	4.459	1.829	-
1250	2908-V10	EQT00000000035	L605	3(XXIX)1	468932.930	3339479.614	1.149E+00	37.795	577.594	6.514	2.286	-

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160280	0520-00412-03	ARE00000000006	L606	6-08	473559.496	3330760.112	8.630E-04	3.048	0.000	0.001	1.000	-
160280	0520-00412-03	EQT00000000002	L607	7-08	473559.496	3330760.112	6.674E-02	3.048	0.000	0.001	1.000	-
5337	0520-00107-V6	EQT00000000044	L608	EGEN1	468201.999	3340122.984	3.024E-01	2.134	699.261	0.003	1.000	-
5337	0520-00107-V6	EQT00000000047	L609	002MSS	468206.255	3340163.197	1.875E+00	30.480	395.372	15.423	1.676	-
5337	0520-00107-V6	EQT00000000011	L610	003	468206.261	3340165.081	2.949E-01	30.480	395.372	15.423	1.676	-
5337	0520-00107-V6	EQT00000000048	L611	003MSS	468206.261	3340165.081	1.875E+00	30.480	395.372	15.423	1.676	-
5337	0520-00107-V6	EQT00000000016	L612	016	468231.961	3340164.674	2.721E-01	33.528	410.928	17.843	1.423	-
5337	0520-00107-V6	EQT00000000049	L613	016MSS	468231.961	3340164.674	1.734E+00	33.528	410.928	17.843	1.423	-
5337	0520-00107-V6	EQT00000000005	L614	005	468152.612	3340287.131	8.573E-02	20.351	435.928	2.926	0.954	-
5337	0520-00107-V6	EQT00000000001	L615	001	468205.468	3340256.836	1.105E+00	86.868	373.150	14.076	3.962	-
5337	0520-00107-V6	EQT00000000035	L616	001SU	468205.468	3340256.836	1.295E+00	64.999	373.150	14.076	3.962	-
5337	0520-00107-V6	EQT00000000045	L617	EGEN2	468615.012	3339936.958	5.040E-02	2.134	699.261	0.003	1.000	-
5337	0520-00107-V6	EQT00000000015	L618	015	468204.977	3340286.979	9.588E-01	63.703	408.150	11.918	1.372	-
1250	3010-V6	EQT00000000354	L619	2(202)25	468163.903	3340496.092	3.365E+01	61.570	1273.150	20.117	3.505	-
5337	0520-00107-V6	EQT00000000008	L620	008	468099.398	3340657.624	1.232E+00	81.077	1273.150	19.995	1.097	-
5337	0520-00107-V6	EQT00000000046	L621	008SU	468080.211	3340679.842	2.306E+01	81.077	1273.150	19.995	1.097	-
9061	0520-00127-V6	EQT00000000008	L622	88	468129.500	3340677.900	5.679E-01	60.960	0.000	0.001	0.610	-
1250	2796-V14	EQT00000000007	L623	3(XXX)1	469953.000	3339145.000	7.905E+00	15.240	1088.706	5.457	2.438	The stack velocity is calculated based on the stack flow and diameter obtained from 2796-V14 permit.
1253	0520-00006-V13	RLP00000000113	L624	1-18	469085.971	3340050.977	3.625E-02	9.144	622.039	11.500	0.457	-
9061	0520-00127-V6	EQT00000000016	L625	1-94A	468577.000	3340474.500	4.890E-01	15.240	427.594	18.014	0.838	-
9061	0520-00127-V6	EQT00000000017	L626	1-94B	468577.000	3340478.900	8.659E-01	15.240	427.594	18.014	0.838	-
1253	0520-00006-V13	EQT00000000355	L627	ENG1	469304.750	3339903.646	1.008E-01	2.438	366.483	10.647	0.061	-
1253	0520-00006-V13	EQT00000000356	L628	ENG2	469304.750	3339903.646	3.024E-01	2.438	366.483	20.187	0.076	-
1253	0520-00006-V13	EQT00000000357	L629	ENG3	469304.750	3339903.646	1.789E+00	2.438	533.150	24.975	0.198	-
9061	0520-00127-V6	EQT00000000011	L630	201	468488.310	3340579.600	1.115E+00	3.048	855.372	0.001	0.101	-
9061	0520-00127-V6	EQT00000000012	L631	202	468526.800	3340572.700	1.115E+00	3.048	855.372	0.001	0.101	-
9061	0520-00127-V6	EQT00000000010	L632	200	468595.160	3340521.900	2.229E+00	4.572	755.372	0.001	0.134	-
9061	0520-00127-V6	EQT00000000102	L633	1-14	468579.600	3340539.599	2.273E-02	9.144	422.039	15.139	0.680	-
1253	0520-00006-V13	EQT00000000365	L634	WE-1	468699.985	3340500.089	1.248E-01	2.438	366.483	2.012	0.152	-
1253	0520-00006-V13	EQT00000000366	L635	WE-2	468699.985	3340500.089	1.842E-01	2.438	366.483	2.957	0.152	-
1253	0520-00006-V13	EQT00000000138	L636	Z1	469304.820	3340203.506	5.328E-01	45.720	1273.000	20.000	0.610	LDEQ default flare stack temperature and stack velocity were utilized. EQT00000000019 and EQT00000000138 are part of GRP00000000012 source. Therefore, GRP00000000012 annual emissions were split equally between these two sources.
1253	0520-00006-V13	EQT00000000373	L637	ENG6	469010.042	3340467.959	1.336E+00	3.048	635.928	72.390	0.128	-
1253	0520-00006-V13	EQT00000000374	L638	ENG7	469010.042	3340467.959	2.772E-01	3.048	864.817	113.904	0.101	-
1253	0520-00006-V13	EQT00000000371	L639	2-18	469023.971	3340525.986	4.223E-01	6.401	549.817	8.068	1.000	-
1253	0520-00006-V13	EQT00000000372	L640	1-19	469028.011	3340558.997	4.223E-01	6.401	549.817	8.068	1.000	-
196978	0520-00492-V1	EQT00000000001	L641	001	470244.890	3339464.410	1.237E-01	91.440	0.000	96.622	1.067	-
196978	0520-00492-V1	EQT00000000002	L642	002	470246.400	3339464.439	4.890E-03	91.440	0.000	51.206	0.457	-
1253	0520-00006-V13	EQT00000000325	L643	5-08	468999.804	3340625.786	3.465E-01	12.192	491.483	17.605	0.863	-
1253	0520-00006-V13	EQT00000000322	L644	2-08	469014.820	3340625.744	1.848E+00	12.192	491.483	21.531	1.097	-
1253	0520-00006-V13	EQT00000000321	L645	1-08	469017.804	3340625.735	1.848E+00	12.192	491.483	21.531	1.097	-
1253	0520-00006-V13	EQT00000000324	L646	4-08	469019.921	3340625.729	3.465E-01	12.192	491.483	17.605	0.863	-
1253	0520-00006-V13	SCN00000000001	L647	MSS-BET	469019.921	3340625.729	9.692E-01	1.000	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000370	L648	1-16	469041.868	3340625.667	1.248E+00	12.192	449.817	27.914	1.817	-
132137	0520-00363-01	EQT00000000001	L649	H-1	474469.910	3331157.880	2.080E-01	9.144	810.928	3.658	0.762	-
196978	0520-00492-V1	EQT00000000017	L650	008B	470326.820	3339523.490	5.040E-02	2.743	699.817	57.912	0.204	-
196978	0520-00492-V1	EQT00000000016	L651	008A	470326.940	3339527.800	5.040E-02	2.743	699.817	57.912	0.204	-
196978	0520-00492-V1	EQT00000000018	L652	008C	470327.040	3339528.700	5.040E-02	2.743	699.817	57.912	0.204	-
209722	0520-00508-00	EQT00000000008	L653	6-18-F	445965.802	3335679.385	1.212E+00	4.572	1088.706	299.923	0.335	-

NO_2 Annual NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1253	0520-00006-V13	EQT00000000019	L654	Z2	469604.846	3340403.685	5.328E-01	45.720	1273.000	20.000	0.610	LDEQ default flare stack temperature and stack velocity were utilized. EQT00000000019 and EQT00000000138 are part of GRP00000000012 source. Therefore, GRP00000000012 annual emissions were split equally between these two sources.
196978	0520-00492-V1	EQT00000000043	L655	005	470409.720	3339694.060	9.062E-02	60.960	372.039	11.430	3.658	-
196978	0520-00492-V1	EQT00000000025	L658	011A	470537.360	3339762.540	1.720E+00	60.960	353.150	20.147	2.134	-
196978	0520-00492-V1	EQT00000000026	L659	011B	470602.580	3339763.489	1.720E+00	60.960	353.150	20.147	2.134	-
196978	0520-00492-V1	EQT00000000044	L660	023	470578.420	3339791.309	2.908E+00	6.706	745.372	38.100	0.610	-
196978	0520-00492-V1	EQT00000000012	L661	006D	470567.480	3339892.820	3.645E-02	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000011	L662	006C	470567.170	3339912.630	3.645E-02	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000010	L663	006B	470566.910	3339932.439	3.645E-02	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000009	L664	006A	470566.620	3339952.250	3.645E-02	45.720	522.039	126.187	0.610	-
11496	0520-00142-V14	EQT00000000084	L665	12-01	470025.000	3340481.000	7.308E-02	1.554	933.150	111.423	0.049	-
11496	0520-00142-V14	EQT00000000102	L666	18-06	470285.441	3340416.558	2.394E-02					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L667. Therefore, this source was excluded from this modeling analysis.
11496	0520-00142-V14	EQT00000000102	L667	18-06	470285.441	3340416.558	2.394E-02	2.374	933.150	134.828	0.070	-
11496	0520-00142-V14	EQT00000000103	L668	17-03	470285.441	3340416.558	1.436E-01	1.701	933.150	82.269	0.070	-
11496	0520-00142-V14	EQT00000000104	L669	18-03	470285.441	3340416.558	2.394E-02					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L670. Therefore, this source was excluded from this modeling analysis.
11496	0520-00142-V14	EQT00000000104	L670	18-03	470285.441	3340416.558	2.394E-02	2.033	933.150	96.536	0.082	-
11496	0520-00142-V14	EQT00000000105	L671	18-02	470285.441	3340416.558	2.374E-02	2.033	933.150	96.536	0.082	-
11496	Regper-ENG	EQT00000000108	L672	18-05	470285.441	3340416.558	2.394E-02	2.374	933.150	134.828	0.070	-
11496	Regper-ENG	EQT00000000108	L673	18-05	470285.441	3340416.558	2.331E-02					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L672. Therefore, this source was excluded from this modeling analysis.
11496	0520-00142-V14	SCN00000000002	L674	88-90a	470285.441	3340416.558	1.113E+00	73.457	513.150	10.973	1.890	SCN00000000002 and SCN00000000003 are alternate operating scenarios for EQT00000000013. Consistent with the modeling analysis performed for this facility and review of the modeling report submitted to LDEQ in October 2019, this source was excluded.
11496	0520-00142-V14	SCN00000000003	L675	Hurricane OP	470285.441	3340416.558	3.018E-01	1.000	0.000	0.001	1.000	
11496	0520-00142-V14	EQT00000000083	L680	95-170	470322.000	3340466.000	3.856E+00	2.987	804.261	56.775	0.152	-
11496	0520-00142-V14	EQT00000000064	L681	90-351	470319.754	3340504.340	1.085E+00	24.323	438.150	28.816	0.838	-
11496	0520-00142-V14	EQT00000000046	L682	88-350	470319.769	3340509.880	1.085E+00	24.323	438.150	28.816	0.838	-
11496	0520-00142-V14	EQT00000000028	L683	88-221	470374.604	3340497.543	2.057E-01	32.796	373.706	27.615	0.914	-
11496	0520-00142-V14	EQT00000000029	L684	88-222	470378.454	3340497.532	1.812E-01	32.796	373.706	23.195	0.914	-
11496	0520-00142-V14	EQT00000000024	L685	88-150	470408.468	3340561.723	8.314E-02	29.809	348.150	17.822	0.509	-
11496	0520-00142-V14	EQT00000000013	L686	88-90	470353.979	3340666.034	1.026E+00	73.457	513.150	10.973	1.890	-
11496	0520-00142-V14	EQT00000000018	L690	88-121	470403.500	3340682.522	3.999E-02	33.406	573.150	23.473	0.253	-
11496	0520-00142-V14	EQT00000000021	L691	88-132	470421.667	3340672.943	5.610E-02	33.406	573.150	47.067	0.253	-
11496	0520-00142-V14	EQT00000000020	L692	88-131	470403.525	3340691.720	5.610E-02	33.406	573.150	47.067	0.253	-
11496	0520-00142-V14	EQT00000000019	L693	88-122	470421.693	3340682.806	3.999E-02	33.406	573.150	23.473	0.253	-
11496	0520-00142-V14	EQT00000000082	L694	95-160	470467.830	3340666.469	3.856E+00	5.944	756.483	86.042	0.253	-

NO_2 Annual NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
203831	3136-V2	EQT00000000006	L742	ETH-FLARE2	470513.640	3342872.670	5.684E-01	13.716	1273.150	20.000	1.000	EQT00000000005 and EQT00000000006 are part of GRP00000000001 source. Therefore, GRP00000000001 annual emissions were split equally between these two sources. LDEQ default flare stack velocity was utilized.
203831	3136-V2	EQT00000000005	L743	ETH-FLARE1	470533.023	3342994.734	5.684E-01	39.624	1273.150	22.811	18.288	EQT00000000005 and EQT00000000006 are part of GRP00000000001 source. Therefore, GRP00000000001 annual emissions were split equally between these two sources.
203831	3136-V2	EQT00000000001	L753	ETH-BOILER	470754.370	3342958.902	1.034E+00	64.922	422.039	15.545	2.134	-
195519	0520-00488-V4	EQT00000000020	L758	MEG-TOX	470817.959	3342985.993	5.270E-01	15.240	533.150	14.603	1.366	-
203831	3136-V2	EQT00000000011	L759	ETH-H-1101	470723.044	3343084.648	4.008E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000012	L760	ETH-H-1102	470723.083	3343099.386	4.008E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000013	L761	ETH-H-1103	470723.092	3343102.600	4.008E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000014	L762	ETH-H-1104	470723.035	3343117.338	4.008E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000015	L763	ETH-H-1105	470723.046	3343121.438	4.008E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000016	L764	ETH-H-1106	470723.081	3343134.847	4.008E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000017	L765	ETH-H-1107	470723.091	3343138.393	4.008E+00	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000007	L768	ETH-FWP1	471316.966	3343139.038	4.536E-01	9.144	738.706	159.822	0.152	-
203831	3136-V2	EQT00000000008	L769	ETH-FWP2	471316.966	3343139.038	4.536E-01	9.144	738.706	159.822	0.152	-
1255	2106-V7	EQT00000000066	L775	011	471622.980	3343764.004	6.439E+01	24.994	420.928	19.227	4.840	-
1255	2106-V7	EQT00000000065	L776	010	471622.964	3343795.032	4.384E+00	24.994	420.928	19.114	4.840	-
1255	897-V9	EQT00000000080	L777	030	472129.321	3343376.630	4.206E-01	45.720	444.261	3.645	2.374	-
1255	2106-V7	EQT00000000064	L778	009	471673.035	3343769.969	3.403E+01	24.384	449.817	14.691	5.334	-
1255	2106-V7	EQT00000000663	L779	009A	471684.968	3343770.049	5.104E+01	24.384	449.817	19.998	4.572	-
1255	897-V9	EQT00000000077	L780	016	472122.472	3343407.675	8.909E-01	46.634	505.372	9.921	1.219	-
1255	897-V9	EQT00000000078	L781	017	472137.482	3343406.751	8.909E-01	46.634	505.372	9.921	1.219	-
1255	2106-V7	EQT00000000063	L782	008	471673.016	3343837.011	3.403E+01	24.384	449.817	14.691	5.334	-
1255	2798-V5	EQT00000000599	L783	159	471866.017	3343747.974	1.323E-01	4.572	533.150	140.126	0.076	-
1255	Regper-ENG	EQT00000000686	L784	162	471877.964	3343753.705	2.016E-02	2.438	668.150	63.045	0.101	-
1255	2359-V6	EQT00000000552	L785	34	472277.000	3343415.000	2.734E+00	4.572	477.594	30.267	0.229	-
1255	2359-V6	EQT00000000673	L786	565	472277.000	3343415.000	2.520E-02	4.572	866.483	44.678	1.000	-
1255	2798-V5	EQT00000000681	L787	041	471841.966	3343788.039	9.828E-01	2.566	477.594	165.263	0.101	-
1255	2798-V5	EQT00000000682	L788	042	471841.966	3343788.039	5.796E-01	2.566	477.594	102.879	0.101	-
1255	897-V9	EQT00000000079	L789	021	472139.364	3343541.606	1.292E-01	12.192	1144.261	3.679	0.838	-
1255	2269-V7	EQT00000000353	L790	544	472811.000	3343073.000	2.877E-04	3.658	349.817	1.631	0.052	-
1255	2269-V7	EQT00000000685	L797	044	472314.042	3343661.949	2.319E-01	2.420	477.594	65.666	0.101	-
1255	2040-V10	EQT00000000261	L798	345	472312.996	3343704.947	1.186E+00	23.774	338.706	12.229	1.067	-
1255	2106-V7	EQT00000000068	L799	033	472780.965	3343317.036	8.215E+01	30.480	366.483	28.109	5.410	-
1255	2040-V10	EQT00000000392	L800	346	472371.963	3343696.044	7.796E-01	29.870	316.483	12.713	0.914	-
1255	2040-V10	EQT00000000393	L801	347	472371.963	3343696.044	3.164E-02	30.175	344.261	3.688	0.762	-
1255	2106-V7	EQT00000000067	L802	032	472780.978	3343361.029	8.215E+01	30.480	366.483	28.109	5.410	-
1255	2270-V6	EQT00000000602	L808	22	472377.700	3343897.800	5.760E-02	12.802	644.261	4.877	0.610	-
1255	2106-V7	EQT00000000062	L809	007	472966.976	3343391.042	5.351E+01	45.720	429.817	13.701	3.200	-
1255	3021-V6	EQT00000000383	L812	152	472772.980	3343588.992	4.208E+00	3.048	366.483	64.502	0.152	-
1255	2798-V5	EQT00000000598	L813	158	472705.040	3343665.954	1.323E-01	4.572	533.150	140.126	0.076	-
185422	0520-00471-V1	EQT00000000001	L814	23	471898.320	3344421.299	9.151E+00	24.384	616.483	18.370	1.981	-
185422	0520-00471-V1	EQT00000000002	L815	29	471898.320	3344421.299	1.139E+00	33.528	399.817	16.170	0.610	-
185422	0520-00471-V1	EQT00000000003	L816	200	471898.320	3344421.299	3.265E-01	25.908	360.928	13.201	1.067	-
185422	0520-00471-V1	EQT00000000019	L817	220	471898.320	3344421.299	2.307E-01	20.117	413.706	23.040	1.015	-
185422	0520-00471-V1	EQT00000000044	L818	247	471898.320	3344421.299	2.537E-01	41.910	385.928	26.786	1.219	-
185422	0520-00471-V1	EQT00000000071	L819	564	471898.320	3344421.299	4.712E+00	4.572	366.483	0.001	0.204	-
185422	0520-00471-V1	EQT00000000087	L820	282	471898.320	3344421.299	1.913E-01	41.300	385.928	20.199	1.219	-
185422	0520-00471-V1	EQT00000000093	L821	604	471898.320	3344421.299	4.027E-01	9.296	672.039	3.261	1.372	-
185422	0520-00471-V1	EQT00000000094	L822	605	471898.320	3344421.299	4.027E-01	9.296	672.039	3.261	1.372	-
1255	2798-V5	EQT00000000677	L823	036	472749.014	3343741.974	3.780E-01	2.566	477.594	68.732	0.101	-

NO_2 Annual NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1255	2798-V5	EQT00000000680	L824	039	472749.024	3343745.963	3.780E-01	2.566	477.594	68.732	0.101	-
1255	2695-V16	EQT00000000433	L825	20	472318.988	3344172.010	1.575E-01	16.968	644.261	10.129	0.610	-
1255	2798-V5	EQT00000000679	L826	038	472773.954	3343787.013	3.780E-01	2.566	477.594	68.732	0.101	-
1255	2798-V5	EQT00000000678	L827	037	472773.981	3343797.983	3.780E-01	2.566	477.594	68.732	0.101	-
1255	2798-V5	EQT00000000600	L828	160	472649.961	3343921.960	4.246E-01	4.572	533.150	94.387	0.076	-
1255	2695-V16	EQT00000000432	L829	15	472438.967	3344165.946	7.580E-01	38.710	505.372	6.840	1.448	-
1255	Regper-ENG	EQT00000000688	L833	045	472694.115	3343992.992	2.520E-02	1.000	0.000	0.001	1.000	-
1255	Regper-ENG	EQT00000000689	L834	046	472694.115	3343992.992	2.520E-02	1.000	0.000	0.001	1.000	-
1255	2798-V5	TRT00000000001	L835	019A	472894.020	3343891.987	1.614E-01	19.812	644.261	4.761	0.914	-
1255	2798-V5	EQT00000000601	L836	161	472744.034	3344061.017	3.855E-02	6.300	533.150	9.010	0.457	-
1255	Regper-ENG	EQT00000000710	L837	043	472549.055	3344244.457	3.528E-01	3.048	819.261	136.800	0.101	-
1255	2206-V3	EQT00000000139	L838	26	472490.851	3344364.393	2.990E-01	5.486	505.372	13.664	0.610	-
1255	2206-V3	EQT00000000140	L839	27	472490.851	3344364.393	2.015E-03	13.716	1255.372	133.198	0.067	-
1255	2359-V6	EQT00000000587	L840	031B	472490.851	3344364.393	4.095E-01	2.819	864.817	76.487	0.128	-
1255	2359-V6	EQT00000000588	L841	031C	472490.851	3344364.393	6.665E-01	3.200	758.706	86.103	0.152	-
1255	2359-V6	EQT00000000589	L842	031D	472490.851	3344364.393	3.451E+00	3.328	683.150	133.414	0.128	-
1255	2359-V6	EQT00000000675	L843	031A	472490.851	3344364.393	2.785E-01	2.234	690.372	131.975	0.128	-
1255	2359-V6	EQT00000000676	L844	031E	472490.851	3344364.393	6.149E-01	3.328	759.817	84.552	0.152	-
196978	0520-00492-V1	GRP00000000002	L845	Boilers and Superheaters Group	470666.797	3340155.010	1.133E+00	1.000	0.000	0.001	1.000	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
742	0520-00081-11	EQT00000000015	L1	LSC-1	460823.704	3331782.877	1.512E-02	1.829	294.261	13.170	1.000	-
742	0520-00081-11	EQT00000000015	L2	LSC-1	460823.704	3331782.877	1.512E-02	1.829		13.170		This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L1. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	EQT00000000016	L3	LSC-2	460823.704	3331782.877	1.512E-02	1.829		13.170		This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L4. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	EQT00000000016	L4	LSC-2	460823.704	3331782.877	1.512E-02	1.829	294.261	13.170	1.000	-
742	0520-00081-11	EQT00000000013	L5	KDS-5	460984.732	3331905.418	1.260E-02	26.975		13.170	0.405	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L6. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	EQT00000000013	L6	KDS-5	460984.732	3331905.418	1.260E-02	26.975	294.261	13.170	0.405	-
742	0520-00081-11	EQT00000000014	L7	KDS-6	460984.732	3331905.418	1.260E-02	26.975		13.170	0.405	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L8. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	EQT00000000014	L8	KDS-6	460984.732	3331905.418	1.260E-02	26.975	294.261	13.170	0.405	-
742	0520-00081-11	EQT00000000060	L9	TDU TO-1	461179.915	3331852.423	5.040E-03	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000061	L10	TDU TO-2	461179.915	3331852.423	5.040E-03	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000062	L11	ORU TO-1	461179.915	3331852.423	5.040E-03	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000070	L12	TDU BH-3	461179.915	3331852.423	1.260E-04	4.243	0.000	2.048	0.280	-
742	0520-00081-11	EQT00000000071	L13	TDU BH-4	461179.915	3331852.423	1.260E-04	4.243	0.000	2.048	0.280	-
742	0520-00081-11	EQT00000000073	L14	TDU H-1	461179.915	3331852.423	3.528E-02	10.973	1088.706	5.081	1.524	-
742	0520-00081-11	EQT00000000074	L15	TDU H-2	461179.915	3331852.423	3.528E-02	10.973	1088.706	5.081	1.524	-
742	Regper-Emerg Eng	EQT00000000156	L16	TDU DGEN-1	461179.915	3331852.423	6.174E-02	1.000	0.000	0.001	1.000	-
742	0520-00081-11	ARE00000000001	L17	BH-307	461091.760	3331905.039	2.268E-02	19.812		13.713		This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L18. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	ARE00000000001	L18	BH-307	461091.760	3331905.039	2.268E-02	19.812	294.261	13.713	1.000	-
742	0520-00081-11	EQT00000000011	L19	KDS-3	460984.951	3331966.918	1.260E-02	1.000	0.000	0.001	1.000	-
742	0520-00081-11	EQT00000000012	L20	KDS-4	460984.951	3331966.918	1.260E-02	26.975	294.261	13.170	0.405	-
742	0520-00081-11	EQT00000000012	L21	KDS-4	460984.951	3331966.918	1.260E-02	26.975		13.170	0.405	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L20. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	ARE00000000002	L22	BH-308	461091.978	3331966.539	2.268E-02	19.812		12.162		This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L23. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	ARE00000000002	L23	BH-308	461091.978	3331966.539	2.268E-02	19.812	294.261	12.162	1.000	-
742	0520-00081-11	EQT00000000009	L24	KDS-1	461199.005	3331966.161	1.260E-02	16.459	294.261	15.194	1.000	-
742	0520-00081-11	EQT00000000009	L25	KDS-1	461199.005	3331966.161	1.260E-02	16.459		15.194		This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L24. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	EQT00000000037	L26	EMER-GEN 1	461248.000	3332000.000	8.064E-02	6.096	533.150			This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L27. Therefore, this source was excluded from this modeling analysis.
742	0520-00081-11	EQT00000000037	L27	EMER-GEN 1	461248.000	3332000.000	8.064E-02	3.048	800.150	101.471	0.152	-
742	0520-00081-11	EQT00000000038	L28	EMER-GEN 2	461248.000	3332000.000	8.064E-02	3.048	800.150	101.471	0.152	-

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742	0520-00081-11	EQT00000000038	L29	EMER-GEN 2	461248.000	3332000.000	8.064E-02	6.096	533.150			This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L28. Therefore, this source was excluded from this modeling analysis.
742	Regper-Emerg Eng	EQT00000000157	L30	0	460825.271	3332223.020	1.512E-02	1.000	0.000	0.001	1.000	-
742	0520-00081-11	EQT00000000010	L31	KDS-2	461284.872	3332112.131	5.166E-02	1.000	0.000	0.001	1.000	-
742	0520-00081-11	EQT00000000072	L32	ORU ROB	461284.872	3332112.131	1.260E-04	1.000	0.000	0.001	1.000	-
742	0520-00081-11	EQT00000000075	L33	TDU GEN-1	461284.872	3332112.131	1.835E+00	1.000	0.000	0.001	1.000	-
742	0520-00081-11	EQT00000000076	L34	TDU GEN-2	461284.872	3332112.131	1.835E+00	1.000	0.000	0.001	1.000	-
742	0520-00081-11	EQT00000000096	L35	ORU GEN-1	461284.872	3332112.131	1.835E+00	1.000	0.000	0.001	1.000	-
742	0520-00081-11	EQT00000000040	L36	DM-2	461027.000	3332266.000	4.536E-02	3.048	716.483	419.755	0.076	-
742	0520-00081-11	EQT00000000039	L37	DM-1	461073.000	3332262.999	1.600E-01	3.048	716.483	148.724	0.128	-
123032	0520-00328-03	EQT00000000016	L38	16-04-F	455303.286	3329864.685	6.300E-03	7.620	1088.706	224.311	0.122	-
123032	0520-00328-03	EQT00000000029	L39	33-16-ICE-ES	455303.286	3329864.685	3.780E-03	3.048	905.372	22.028	0.152	-
123032	0520-00328-03	EQT00000000030	L40	34-16-GR-BS	455303.286	3329864.685	5.040E-04	3.048	533.150	5.700	0.152	-
196950	0520-00490-00	EQT00000000001	L41	1-15-ICE-ES	455072.081	3332235.819	3.780E-03	3.810	555.372	12.924	0.152	-
90769	0520-00263-03	EQT00000000015	L42	19-12-ICE-ES	455139.698	3332398.661	2.520E-03	3.048	569.261	9.845	0.152	-
199894	0520-00505-00	EQT00000000001	L43	MVC-1	465543.123	3325616.364	1.940E-01	15.240	2199.817	18.288	3.353	-
216323	1340-00369-01	EQT00000000001	L44	MVC-1	465543.123	3325616.364	7.686E-02	15.240	1019.261	0.015	3.353	-
216323	1340-00369-01	EQT00000000014	L45	GEN-1	465543.123	3325616.364	4.032E-02	3.658	505.372	5.758	0.305	-
199894	0520-00505-00	EQT00000000003	L46	BL-1	465540.986	3325610.830	1.764E-02	8.534	519.261	10.058	0.762	-
216323	1340-00369-01	EQT00000000003	L47	BL-1	465540.986	3325610.830	2.016E-02	8.534	519.261	10.058	0.762	-
184675	0520-00472-00	EQT00000000003	L48	003	465862.442	3325671.441	4.032E-02	1.000	294.261	0.001	1.000	-
201334	0520-00504-V0	EQT00000000017	L49	P05TU01	466843.037	3329201.005	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000018	L50	P05TU02	466842.025	3329248.989	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000019	L51	P05TU03	466841.980	3329297.968	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000020	L52	P05TU04	466840.971	3329346.950	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000060	L53	ESSGEN05	466845.964	3329437.025	7.048E-04	4.877	727.594	45.110	0.250	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000025	L54	P05TO01	466847.048	3329509.049	7.308E-02	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000042	L55	P05H01	466869.968	3329537.016	5.799E-04	30.480	566.483	7.620	1.036	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000013	L56	P04TU01	467005.022	3329202.956	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000014	L57	P04TU02	467004.013	3329252.049	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000015	L58	P04TU03	467003.000	3329300.033	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000016	L59	P04TU04	467001.991	3329349.015	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000059	L60	ESSGEN04	467001.023	3329411.959	7.048E-04	4.877	727.594	45.110	0.250	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000024	L61	P04TO01	467007.968	3329511.004	7.308E-02	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000041	L62	P04H01	467032.048	3329539.964	5.799E-04	30.480	566.483	7.620	1.036	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
149553	0520-00386-01	EQT00000000001	L63	GDR-1	454303.086	3334447.180	1.260E-04	3.658	574.817	0.451	0.101	-
149553	0520-00386-01	EQT00000000018	L64	HT-1	454303.086	3334447.180	1.260E-04	3.658	574.817	0.195	0.152	-
149553	0520-00386-01	EQT00000000019	L65	LH-1	454303.086	3334447.180	1.260E-04	3.658	574.817	0.195	0.152	-
201334	0520-00504-V0	EQT00000000009	L66	P03TU01	467166.043	3329205.024	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000010	L67	P03TU02	467165.033	3329254.005	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000011	L68	P03TU03	467164.987	3329302.984	4.498E-01	46.330	647.039	30.480	3.109	-

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201334	0520-00504-V0	EQT00000000012	L69	P03TU04	467163.973	3329350.969	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000058	L70	ESSGEN03	467162.042	3329414.026	7.048E-04	4.877	727.594	45.110	0.250	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000023	L71	P03TO01	467170.045	3329512.957	7.308E-02	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000040	L72	P03H01	467192.968	3329542.032	5.799E-04	30.480	566.483	7.620	1.036	Based on the March 2017 modeling report submitted to LDEQ, only two (2) out of five (5) Hot Oil Heaters were modeled. Therefore, EQT00000000039, EQT00000000039, and EQT00000000040 were excluded from this modeling analysis.
201334	0520-00504-V0	EQT00000000030	L73	GFLR2W	467224.966	3329059.020	2.812E+00	45.720	1273.150	20.001	16.785	-
201334	0520-00504-V0	EQT00000000028	L74	GFLR2D	467263.992	3329059.015	3.116E+00	45.720	1273.150	20.001	17.776	-
201334	0520-00504-V0	EQT00000000031	L75	DFLARE01	467286.997	3328920.986	1.260E-03	106.680	1273.150	20.001	0.314	-
201334	0520-00504-V0	EQT00000000033	L76	WFLARE01	467287.006	3328923.978	1.260E-03	106.680	1273.150	20.001	0.354	-
201334	0520-00504-V0	EQT00000000005	L77	P02TU01	467328.031	3329207.977	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000006	L78	P02TU02	467327.017	3329255.961	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000007	L79	P02TU03	467326.007	3329305.054	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000008	L80	P02TU04	467324.996	3329354.036	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000057	L81	ESSGEN02	467324.023	3329415.982	7.048E-04	4.877	727.594	45.110	0.250	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000022	L82	P02TO01	467330.969	3329516.024	7.308E-02	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000039	L83	P02H01	467355.044	3329543.988	5.799E-04	30.480	566.483	7.620	1.036	Based on the March 2017 modeling report submitted to LDEQ, only two (2) out of five (5) Hot Oil Heaters were modeled. Therefore, EQT00000000039, EQT00000000039, and EQT00000000040 were excluded from this modeling analysis.
201334	0520-00504-V0	EQT00000000034	L84	WFLARE02	467471.003	3328840.989	1.260E-03	106.680	1273.150	20.001	0.354	-
201334	0520-00504-V0	EQT00000000032	L85	DFLARE02	467471.958	3328837.994	1.260E-03	106.680	1273.150	20.001	0.314	-
201334	0520-00504-V0	EQT00000000001	L86	P01TU01	467488.956	3329210.049	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000002	L87	P01TU02	467488.041	3329259.031	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000003	L88	P01TU03	467487.990	3329307.012	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000004	L89	P01TU04	467486.978	3329355.994	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000056	L90	ESSGEN01	467485.045	3329419.051	7.048E-04	4.877	727.594	45.110	0.250	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000029	L91	GFLR1W	467505.000	3329062.955	2.812E+00	45.720	1273.150	20.001	16.785	Based on current permit (EDMS Document ID: 11210918) SR No. 181, both wet gas ground flares (EQT0029 and EQT0030) can only be operated simultaneously 1) during commissioning or 2) if the total gas volume simultaneously flared through both wet gas ground flares doesn't exceed the maximum gas volume from one wet gas ground flare alone. Therefore, only modeled one dry gas ground flare (Model ID: L73) to avoid double-counting.
201334	0520-00504-V0	EQT00000000021	L92	P01TO01	467493.045	3329517.983	7.308E-02	22.860	1088.706	15.240	2.286	-

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201334	0520-00504-V0	EQT00000000038	L93	P01H01	467515.967	3329546.948	5.799E-04	30.480	566.483	7.620	1.036	Based on the March 2017 modeling report submitted to LDEQ, only two (2) out of five (5) Hot Oil Heaters were modeled. Therefore, EQT00000000039, EQT00000000039, and EQT00000000040 were excluded from this modeling analysis.
201334	0520-00504-V0	EQT00000000027	L94	GFLR1D	467544.025	3329062.950	3.116E+00	45.720	1273.150	20.001	17.776	Based on current permit (EDMS Document ID: 11210918) SR No. 180, both dry gas ground flares (EQT0027 and EQT0028) can only be operated simultaneously 1) during commissioning or 2) if the total gas volume simultaneously flared through both dry gas ground flares doesn't exceed the maximum gas volume from one dry gas ground flare alone. Therefore, only modeled one dry gas ground flare (Model ID: L74) to avoid double-counting.
201334	0520-00504-V0	EQT00000000048	L95	SWP2P01	467571.964	3329649.948	3.524E-04	7.620	665.372	56.693	0.305	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000049	L96	SWP2P02	467578.998	3329650.038	3.524E-04	7.620	665.372	56.693	0.305	
201334	0520-00504-V0	EQT00000000050	L97	SWP2P03	467587.959	3329650.012	5.034E-05	7.620	665.372	56.693	0.229	
201334	0520-00504-V0	EQT00000000026	L98	CVTO	467691.967	3329433.956	9.702E-02	22.860	1255.372	15.850	2.286	-
201334	0520-00504-V0	EQT00000000053	L99	LNGBP2	467738.992	3329204.992	5.034E-05	7.620	665.372	56.693	0.229	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000052	L100	LNGBP1	467739.010	3329210.976	3.524E-04	7.620	665.372	56.693	0.305	
201334	0520-00504-V0	EQT00000000061	L101	MAGEN	467734.953	3329405.019	3.596E-04	4.877	727.594	45.110	0.250	
201334	0520-00504-V0	EQT00000000062	L102	CRGEN	467717.047	3329968.992	7.048E-04	4.877	727.594	45.110	0.250	
201334	0520-00504-V0	EQT00000000035	L103	MFLARE01	467786.005	3328871.976	2.885E-01	57.912	1273.150	20.001	5.200	-
201334	0520-00504-V0	EQT00000000036	L104	MFLARE01-MSS	467786.005	3328871.976	5.811E-03	57.912	1273.150	20.001	9.775	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000045	L105	SWP1P01	467855.987	3328814.039	1.007E-04	7.620	665.372	56.693	0.305	
201334	0520-00504-V0	EQT00000000046	L106	SWP1P02	467855.966	3328806.947	5.034E-05	7.620	665.372	56.693	0.229	
201334	0520-00504-V0	EQT00000000047	L107	SWP1P03	467855.966	3328806.947	5.034E-05	7.620	665.372	56.693	0.229	
201334	0520-00504-V0	EQT00000000063	L108	LOGEN	467876.026	3329176.002	7.048E-04	4.877	727.594	45.110	0.250	
201334	0520-00504-V0	EQT00000000055	L109	FWP02	467849.995	3329962.951	2.589E-04	7.620	665.372	56.693	0.213	
201334	0520-00504-V0	EQT00000000054	L110	FWP01	467857.029	3329963.042	2.589E-04	7.620	665.372	56.693	0.213	
99407	0560-00184-V10	EQT00000000087	L111	EU11G	467167.900	3325065.000	3.164E-04	3.048	745.928	72.847	0.155	
99407	0560-00184-V10	EQT00000000088	L112	EU11H	467167.900	3325065.000	3.164E-04	3.048	745.928	72.847	0.155	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000089	L113	EU11I	467167.900	3325065.000	3.164E-04	3.048	745.928	72.847	0.155	
205014	0520-00499-00	EQT00000000001	L114	2-16	468121.000	3330164.999	1.966E-01	9.144	388.706	28.285	15.316	-
205014	0520-00499-00	EQT00000000002	L115	3-16	468121.000	3330164.999	2.520E-03	2.713	477.594	8.839	3.658	-
205014	0520-00499-00	EQT00000000003	L116	4-16	468121.000	3330164.999	2.898E-02	1.000	435.928	0.001	1.000	-
205014	0520-00499-00	EQT00000000004	L117	5-16	468121.000	3330164.999	2.646E-02	1.000	0.000	0.001	1.000	-
205014	0520-00499-00	FUG00000000001	L118	1-16	468121.000	3330164.999	4.284E-02	1.000	0.000	0.001	1.000	-
99407	0560-00184-V10	EQT00000000090	L119	EU05F	467307.600	3324638.000	1.927E-03	12.192	729.261	75.590	0.387	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000091	L120	EU05G	467326.000	3324637.999	1.927E-03	12.192	729.261	75.590	0.387	
99407	0560-00184-V10	EQT00000000092	L121	EU05H	467344.600	3324639.000	1.927E-03	12.192	729.261	75.590	0.387	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
99407	0560-00184-V10	EQT00000000096	L122	EU15J	467622.900	3325082.000	1.229E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000095	L123	EU15I	467624.200	3325016.000	1.229E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000094	L124	EU15H	467628.900	3324712.000	1.293E+00	45.720	809.261	43.891	4.572	-
99407	0560-00184-V10	EQT00000000081	L125	EU13C	467808.800	3325051.000	1.613E-01	64.922	1088.706	12.878	3.886	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
99407	0560-00184-V10	EQT00000000082	L126	EU13D	467808.800	3325051.000	1.613E-01	64.922	1088.706	12.878	3.886	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000093	L127	EU15G	467615.400	3324641.000	1.293E+00	45.720	809.261	43.891	4.572	-
99407	0560-00184-V10	EQT00000000044	L128	EU11D	467278.800	3323869.000	3.164E-04	3.048	745.928	72.847	0.155	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000045	L129	EU11E	467278.800	3323869.000	3.164E-04	3.048	745.928	72.847	0.155	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
99407	0560-00184-V10	EQT00000000046	L130	EU11F	467278.800	3323869.000	3.164E-04	3.048	745.928	72.847	0.155	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000073	L131	EU15F	467635.400	3324347.000	1.229E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000072	L132	EU15E	467622.000	3324271.000	1.229E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000053	L133	EU05E	467366.400	3323846.999	1.927E-03	12.192	729.261	75.590	0.387	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000052	L134	EU05D	467366.700	3323828.000	1.927E-03	12.192	729.261	75.590	0.387	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000051	L135	EU05C	467367.000	3323810.000	1.927E-03	12.192	729.261	75.590	0.387	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
99407	0560-00184-V10	EQT00000000079	L136	EU20	467911.900	3324747.000	8.568E-02	13.716	1273.150	19.995	1.189	Updated the stack parameters based on September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121).
99407	0560-00184-V10	EQT00000000084	L137	SSM	467911.900	3324747.000	1.464E+01	13.716	1273.150	19.995	15.423	
99407	0560-00184-V10	EQT00000000071	L138	EU15D	467636.800	3323973.000	1.229E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000083	L139	EU20A	467390.700	3323569.000	1.012E+00	57.912	1273.150	19.995	5.761	Updated the stack parameters based on September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121).
17904	0520-00156-V4	EQT00000000005	L140	8-90	467000.233	3334799.757	2.086E-03	4.572	755.372	0.378	0.134	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
142099	0520-00376-02	EQT00000000001	L141	2-06-GR-BS	450019.590	3329216.316	1.260E-03	4.572	533.150	2.286	0.152	-
142099	0520-00376-02	EQT00000000009	L142	6-06-F	450019.590	3329216.316	1.260E-03	7.620	1088.706	130.150	0.091	-
142099	0520-00376-02	EQT00000000017	L143	18-13-ICE-ES	450019.590	3329216.316	1.260E-03	3.048	810.928	7.925	0.152	-
99407	0560-00184-V10	EQT00000000070	L144	EU15C	467628.500	3323901.000	1.293E+00	45.720	809.261	43.891	4.572	-
134011	0520-00498-00	EQT00000000001	L145	001	464945.278	3336794.326	2.268E-01	1.000	0.000	0.001	1.000	-
134011	0520-00498-00	EQT00000000002	L146	002	464945.278	3336794.326	2.772E-02	1.000	0.000	0.001	1.000	-
81859	0520-00219-V6	EQT00000000004	L147	3-99	466600.157	3335399.908	8.820E-03	7.010	651.483	138.379	0.152	-
99407	0560-00184-V10	EQT00000000001	L148	EU01A	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	Consistent with the air dispersion modeling analysis performed for this facility, the vaporization sources were excluded from the off-property inventory. Refer to April 2013 air dispersion modeling report (pg 16/105) (EDMS Document ID: 8785365).
99407	0560-00184-V10	EQT00000000002	L149	EU01B	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000003	L150	EU01C	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000004	L151	EU01D	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000005	L152	EU01E	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000006	L153	EU01F	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000007	L154	EU01G	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000008	L155	EU01H	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000009	L156	EU01I	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000010	L157	EU01J	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000016	L158	EU03A	467247.295	3323081.245	3.780E-03	34.686	394.261	0.030	0.381	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
99407	0560-00184-V10	EQT00000000021	L159	EU03B	467247.295	3323081.245	3.780E-03	34.686	394.261	0.030	0.381	-
99407	0560-00184-V10	EQT00000000041	L160	EU11A	467455.000	3323328.000	3.740E-04	3.048	658.150	74.981	0.076	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000042	L161	EU11B	467455.000	3323328.000	3.740E-04	3.048	658.150	74.981	0.076	
99407	0560-00184-V10	EQT00000000043	L162	EU11C	467455.000	3323328.000	3.740E-04	3.048	658.150	74.981	0.076	
99407	0560-00184-V10	EQT00000000069	L163	EU15B	467648.600	3323602.999	1.293E+00	45.720	809.261	43.891	4.572	-
99407	0560-00184-V10	EQT00000000068	L164	EU15A	467649.800	3323536.999	1.293E+00	45.720	809.261	43.891	4.572	-
81859	0520-00219-V6	EQT00000000005	L165	4-99	466600.817	3335680.373	4.603E-04	3.048	533.150	9.144	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
81859	Regper-Eng	EQT00000000006	L166	ergency Diesel Engi	466600.817	3335680.373	1.870E-04	1.000	0.000	0.001	1.000	
81859	0520-00219-V6	SCN00000000001	L167	1-99SU/SD	466600.817	3335680.373	2.520E+00	1.000	0.000	0.001	1.000	It is an alternate operating scenario of EQT00000000002. The emissions from EQT00000000002 are modeled under Model ID: L169. Therefore, this source was excluded.
81859	0520-00219-V6	SCN00000000002	L168	2-99SU/SD	466600.817	3335680.373	2.520E+00	1.000	0.000	0.001	1.000	It is an alternate operating scenario of EQT00000000003. The emissions from EQT00000000003 are modeled under Model ID: L170. Therefore, this source was excluded.
81859	0520-00219-V6	EQT00000000002	L169	1-99	466601.009	3335680.261	2.520E+00	21.336	879.261	23.622	7.566	The stack diameter is calculated based on the permitted flow rate and stack velocity.
81859	0520-00219-V6	EQT00000000003	L170	2-99	466601.009	3335680.261	2.520E+00	21.336	879.261	36.363	6.094	The stack diameter is calculated based on the permitted flow rate and stack velocity.
145324	0560-00253-02	EQT00000000008	L171	GE-01	451585.657	3323182.284	1.260E-03	7.620	810.928	76.880	0.152	-
145324	0560-00253-02	EQT00000000009	L172	GE-02	451585.657	3323182.284	1.260E-03	7.620	810.928	76.880	0.152	-
145324	0560-00253-02	EQT00000000010	L173	GR-01	451585.657	3323182.284	1.260E-03	7.620	449.817	1.747	0.305	-
145324	0560-00253-02	EQT00000000015	L174	PE-01	451585.657	3323182.284	1.260E-03	7.620	755.372	66.318	0.152	-
145324	0560-00253-02	EQT00000000016	L175	PE-02	451585.657	3323182.284	1.260E-03	7.620	755.372	66.318	0.152	-
145324	0560-00253-02	EQT00000000034	L176	CE-02	451585.657	3323182.284	1.260E-04	6.096	727.594	67.147	0.253	-
154027	0520-00403-02	EQT00000000005	L177	ENG-1	465122.055	3337032.011	1.260E-02	3.048	717.594	103.022	0.076	-
154027	0520-00403-02	EQT00000000006	L178	ENG-2	465122.055	3337032.011	5.670E-02	5.486	785.372	126.797	0.101	-
99407	0560-00184-V10	EQT00000000056	L179	EU13A	467835.000	3323584.000	1.613E-01	64.922	1088.706	12.878	3.886	-
99407	0560-00184-V10	EQT00000000057	L180	EU13B	467835.000	3323584.000	1.613E-01	64.922	1088.706	12.878	3.886	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
154027	0520-00403-02	EQT00000000001	L181	FL-01	465202.167	3337000.951	1.260E-03	33.528	1273.150	0.198	0.509	-
154027	0520-00403-02	EQT00000000002	L182	HT-01	465202.167	3337000.951	4.536E-02	12.247	423.150	26.591	0.978	-
154027	0520-00403-02	SCN00000000001	L183	0	465197.432	3337026.231	4.632E-02	1.000	0.000	0.001	1.000	-
154027	0520-00403-02	SCN00000000002	L184	0	465197.432	3337026.231	4.603E-02	1.000	0.000	0.001	1.000	-
99407	0560-00184-V10	EQT00000000022	L185	EU05B	467399.100	3322815.000	1.381E-03	7.202	744.261	63.901	0.357	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000020	L186	EU05A	467403.910	3322816.000	1.381E-03	7.202	744.261	63.901	0.357	
99407	0560-00184-V10	EQT00000000047	L187	EU12A	468022.000	3323643.000	2.877E-04	3.048	658.150	74.981	0.076	
99407	0560-00184-V10	EQT00000000048	L188	EU12B	468022.000	3323643.000	2.877E-04	3.048	658.150	74.981	0.076	
7935	0560-00005-12	EQT00000000010	L189	GR-BS-1	459196.960	3318891.035	2.520E-04	3.658	533.150	2.286	0.152	-
7935	0560-00005-12	EQT00000000012	L190	HAC-COMP-1	459196.960	3318891.035	3.276E-02	7.315	866.483	62.484	0.253	-
7935	0560-00005-12	EQT00000000015	L191	HAC-PU-2	459196.960	3318891.035	1.260E-03	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000016	L192	HAC-PU-5	459196.960	3318891.035	1.260E-03	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000017	L193	HAC-PU-3	459196.960	3318891.035	1.260E-03	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000019	L194	HAC-PU-6	459196.960	3318891.035	1.260E-03	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000020	L195	HAC-PU-1	459196.960	3318891.035	1.260E-03	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000022	L196	HAC-PU-8	459196.960	3318891.035	1.260E-03	6.096	810.928	27.950	0.076	-
7935	0560-00005-12	EQT00000000062	L197	HAC-TP-1	459196.960	3318891.035	1.260E-03	3.048	810.928	31.699	0.076	-
7935	0560-00005-12	EQT00000000064	L198	HAC-INJ-1	459196.960	3318891.035	2.520E-03	3.048	810.928	49.682	0.076	-
7935	0560-00005-12	EQT00000000095	L199	HAC-COMP-2A	459196.960	3318891.035	2.520E-03	3.048	848.150	18.258	0.152	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
99407	0560-00184-V10	EQT00000000049	L200	EU12C	467961.000	3323465.000	3.164E-04	3.048	745.928	72.847	0.155	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
99407	0560-00184-V10	EQT00000000050	L201	EU12D	467961.000	3323465.000	3.164E-04	3.048	745.928	72.847	0.155	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
3439	0520-00048-V7	EQT00000000005	L202	10-87a	467523.467	3335054.618	2.394E-02	26.365	298.150	3.679	1.926	-
3439	0520-00048-V7	FUG00000000006	L203	10-87	467523.468	3335054.951	2.284E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	EQT00000000006	L204	11-87a	467576.826	3335023.655	7.686E-02	14.478	298.150	2.131	2.914	-
3439	0520-00048-V7	FUG00000000004	L205	6-87	467576.826	3335023.655	1.512E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	FUG00000000007	L206	11-87	467576.826	3335023.655	4.300E-02	1.000	298.150	0.001	1.000	
3439	0520-00048-V7	EQT00000000010	L207	18a	467550.332	3335085.566	7.560E-03	23.165	298.150	9.702	0.305	-
3439	0520-00048-V7	EQT00000000011	L208	18b	467550.332	3335085.566	3.780E-03	21.641	298.150	10.647	0.411	-
3439	0520-00048-V7	FUG00000000012	L209	18	467550.332	3335085.566	3.938E-03	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	FUG00000000005	L210	9-87	467630.283	3334993.024	1.953E-02	1.000	298.150	0.001	1.000	
99407	0560-00184-V10	EQT00000000017	L211	EU04	467626.700	3322830.060	1.016E+00	57.912	1273.150	19.995	5.761	Updated the stack parameters based on September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121).
3439	0520-00048-V7	EQT00000000007	L212	12-87a	467630.373	3335023.497	4.284E-02	8.687	298.150	14.307	0.695	-
3439	0520-00048-V7	FUG00000000008	L213	12-87	467630.373	3335023.497	4.568E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	EQT00000000008	L214	14-87a	467710.416	3334961.982	2.520E-02	41.401	298.150	5.337	1.472	-
3439	0520-00048-V7	FUG00000000009	L215	14-87	467710.416	3334961.982	1.255E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000151	L216	2-12	467055.011	3335788.041	5.040E-03	39.624	310.928	24.079	0.253	-
3439	0520-00048-V7	FUG00000000013	L217	24	467763.873	3334931.130	5.437E-04	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000150	L218	1-12	467055.041	3335798.014	5.040E-03	39.624	310.928	24.079	0.253	-
1251	0520-00001-V20	EQT00000000187	L219	1-17	467055.041	3335798.014	1.260E-03	14.021	310.928	13.990	0.253	-
1251	0520-00001-V20	EQT00000000188	L220	2-17	467055.041	3335798.014	1.260E-03	27.737	310.928	9.327	0.253	-
1251	0520-00001-V20	EQT00000000189	L221	3-17	467055.041	3335798.014	1.134E-02	10.363	299.817	9.540	0.274	-
1251	0520-00001-V20	EQT00000000144	L222	3-07	467053.028	3335801.012	1.260E-03	25.146	322.039	23.683	0.610	-
1251	0520-00001-V20	EQT00000000026	L223	10-96	467095.030	3335773.959	4.536E-02	32.004	392.039	84.978	0.204	-
1251	0520-00001-V20	EQT00000000092	L224	5-96	467062.980	3335811.953	1.260E-03	39.624	310.928	24.079	0.253	-
1251	0520-00001-V20	EQT00000000184	L225	1-16	467062.980	3335811.953	1.260E-03	39.624	310.928	24.079	0.253	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1251	0520-00001-V20	EQT00000000033	L226	12-96	467079.980	3335796.942	3.611E-02	40.234	810.928	7.925	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
7935	0560-00005-12	EQT00000000023	L227	HAC-PU-4	459200.000	3318700.000	1.260E-03	6.096	810.928	27.950	0.076	-
3439	0520-00048-V7	EQT00000000026	L228	1-15	467537.682	3335269.996	1.260E-03	3.048	298.150	6.029	0.305	-
1251	0520-00001-V20	EQT00000000077	L229	4-96	467085.033	3335811.997	1.260E-03	46.025	310.928	26.304	0.076	-
1251	0520-00001-V20	EQT00000000113	L230	8-96	467095.045	3335810.970	1.260E-03	46.025	324.817	30.876	0.052	-
1251	0520-00001-V20	RLP00000000004	L231	11-96	467108.967	3335796.966	4.687E-01	60.960	534.817	30.267	1.219	Based on EDMS Document ID: 12637130, the emissions will not occur simultaneously from EQT00000000033 and RLP00000000004. Since the EQT00000000033 source was already included in the model, therefore excluded this source from the modeling analysis.
1251	0520-00001-V20	EQT00000000183	L232	17-15	467124.992	3335809.994	2.520E-02	4.572	310.928	14.752	2.134	-
30168	0520-00194-07	EQT00000000003	L233	H-1	466537.753	3336411.929	2.369E-01	51.511	477.594	0.001	1.000	-
30168	0520-00194-07	EQT00000000005	L234	FE-1	466537.753	3336411.929	5.796E-02	4.572	477.594	25.268	0.049	-
30168	0520-00194-07	EQT00000000006	L235	FE-2	466537.753	3336411.929	5.796E-02	4.572	477.594	25.268	0.049	-
9002	0560-00019-05	EQT00000000002	L236	6-78	461018.540	3318761.792	1.310E-01	1.000	0.000	0.001	1.000	-
9002	0560-00019-05	EQT00000000005	L237	8-78	461018.540	3318761.792	8.820E-01	1.000	0.000	0.001	1.000	-
9002	0560-00019-05	EQT00000000019	L238	7-11	461018.540	3318761.792	6.930E-02	1.000	0.000	0.001	1.000	-
3439	0520-00048-V7	FUG00000000010	L239	16-87	467684.276	3335177.257	2.520E-01	1.000	298.150	0.001	1.000	-
3439	0520-00048-V7	FUG00000000014	L240	26	467684.276	3335177.257	1.260E-03	1.000	298.150	0.001	1.000	-
3439	0520-00048-V7	FUG00000000015	L241	27	467684.276	3335177.257	1.575E-04	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000191	L242	2-18	467089.985	3335889.995	1.260E-03	17.678	299.817	5.974	0.204	-
1251	0520-00001-V20	EQT00000000178	L243	12-15	467093.000	3335897.000	4.662E-02	32.004	392.039	85.009	0.204	-
3439	0520-00048-V7	EQT00000000004	L244	9-87a	467631.098	3335269.720	1.008E-02	7.315	298.150	13.935	0.695	-
1251	0520-00001-V20	EQT00000000174	L245	6-15	467083.000	3335914.000	3.780E-03	46.025	310.928	26.304	0.076	-
1251	0520-00001-V20	EQT00000000177	L246	11-15	467094.000	3335903.000	2.835E-01	60.960	534.817	30.267	1.219	-
1251	0520-00001-V20	RLP00000000142	L247	8-15	467084.000	3335923.000	2.060E-01	40.234	810.928	7.925	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000181	L248	15-15	467118.000	3335893.000	1.151E-04	3.048	755.372	93.848	0.152	
1251	0520-00001-V20	EQT00000000142	L249	1-07	467165.000	3335842.000	1.260E-03	33.528	394.261	25.176	0.914	-
1251	0520-00001-V20	EQT00000000175	L250	7-15	467083.000	3335932.000	3.780E-03	46.025	310.928	26.304	0.076	-
1251	0520-00001-V20	EQT00000000176	L251	9-15	467083.000	3335932.000	2.520E-03	46.025	324.817	30.876	0.052	-
3439	0520-00048-V7	EQT00000000018	L252	1-12	467791.097	3335084.636	1.260E-04	3.240	298.150	9.851	1.000	-
3439	0520-00048-V7	FUG00000000003	L253	5-87	467791.097	3335084.636	9.800E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000091	L254	5-91	467061.000	3335960.999	4.599E-01	32.004	330.372	20.208	1.006	-
1251	0520-00001-V20	RLP00000000143	L255	10-15	467100.000	3335920.000	1.286E-01	44.196	588.706	12.192	0.405	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000152	L256	3-12	467218.000	3335808.000	1.260E-03	33.528	394.261	25.176	0.914	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

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3439	0520-00048-V7	EQT00000000025	L257	EP-WP	467747.423	3335167.209	3.452E-04	1.524	727.594	37.673	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	FUG00000000004	L258	F24	467073.749	3335966.947	1.260E-03	12.192	298.706	0.001	1.000	-
1251	0520-00001-V20	EQT00000000055	L259	28-90	467111.000	3335927.000	8.278E-01	39.624	344.817	11.034	2.920	-
3439	0520-00048-V7	ARE00000000001	L260	3-87	467791.188	3335115.663	3.404E-02	1.000	298.150	0.001	1.000	Excluded the Wind erosion emissions based on LDEQ's Air modeling guidance. Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	EQT00000000017	L261	ED-K2	467684.355	3335269.563	1.438E-05	1.524	938.706	5.145	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3439	0520-00048-V7	EQT00000000019	L262	ED-K1	467684.355	3335269.563	1.438E-05	1.524	938.706	6.809	0.076	
3439	0520-00048-V7	EQT00000000020	L263	3-12	467684.355	3335269.563	1.260E-03	3.048	298.150	6.029	0.305	-
3439	0520-00048-V7	EQT00000000021	L264	4-12	467684.355	3335269.563	1.260E-04	3.048	298.150	6.029	0.305	-
3439	0520-00048-V7	EQT00000000022	L265	5-12	467684.355	3335269.563	1.260E-03	3.048	298.150	6.029	0.305	-
3439	0520-00048-V7	EQT00000000023	L266	8-12	467684.355	3335269.563	3.780E-03	3.048	449.817	3.432	0.305	-
3439	N/A	EQT00000000031	L267	SNED-K1	467684.355	3335269.563	1.260E-04	1.000	0.000	0.001	1.000	-
3439	0520-00048-V7	FUG00000000018	L268	2-12	467684.355	3335269.563	6.531E-04	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	FUG00000000019	L269	6-12	467684.355	3335269.563	1.260E-03	1.000	298.150	0.001	1.000	-
3439	0520-00048-V7	FUG00000000020	L270	7-12	467684.355	3335269.563	1.260E-03	1.000	298.150	0.001	1.000	-
1251	0520-00001-V20	EQT00000000190	L271	1-18	467063.371	3336006.760	1.260E-03	9.144	310.928	9.449	1.000	-
1251	0520-00001-V20	EQT00000000047	L272	2-96	467086.321	3335984.640	1.260E-03	46.025	310.928	26.304	0.076	-
3439	0520-00048-V7	EQT00000000029	L273	2-21	467767.493	3335180.115	3.780E-04	1.000	298.150	0.001	1.000	-
3439	0520-00048-V7	FUG00000000025	L274	1-21	467767.493	3335180.115	5.408E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000057	L275	3-01	467129.000	3335961.000	1.111E+00	60.655	345.928	16.124	1.372	-
1251	0520-00001-V20	FUG00000000003	L276	F12	467106.570	3335993.444	1.260E-03	30.480	298.706	0.001	1.000	-
1251	0520-00001-V20	EQT00000000118	L277	4-06	467182.000	3335917.000	1.512E-02	4.572	302.594	1.829	1.829	-
3439	0520-00048-V7	RLP00000000006	L278	4-87	467738.093	3335269.405	7.396E+00	60.960	1366.483	17.904	5.182	Per February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source was excluded since it is a duplicate of RLP0037.
3439	0520-00048-V7	FUG00000000002	L279	2-87	467738.094	3335269.738	9.450E-04	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000182	L280	16-15	467119.000	3336019.000	5.753E-05	1.829	703.706	114.513	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3439	0520-00048-V7	EQT00000000028	L281	EG-2	467736.549	3335301.102	1.870E-04	1.000	0.000	0.001	1.000	
3439	0520-00048-V7	FUG00000000017	L282	2-09	467738.184	3335300.543	1.890E-02	6.096	298.150	0.001	3.658	-
1251	0520-00001-V20	EQT00000000173	L283	5-15	467186.000	3335961.000	7.560E-03	46.025	310.928	26.304	0.076	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

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1251	0520-00001-V20	FUG00000000008	L284	F25	467156.000	3335995.000	1.260E-03	30.480	298.706	0.001	1.000	-
1251	0520-00001-V20	EQT00000000180	L285	14-15	467140.000	3336020.000	1.638E-02	4.572	302.594	0.823	1.829	-
1251	0520-00001-V20	EQT00000000050	L286	23-90	467051.102	3336122.153	1.260E-03	6.096	299.817	7.864	0.305	-
3439	0520-00048-V7	EQT00000000016	L287	3-09	467764.956	3335300.132	2.381E-01	10.668	310.928	7.309	6.096	-
3439	0520-00048-V7	RLP00000000037	L288	1-09	467764.957	3335300.465	7.396E+00	60.655	374.817	28.042	2.438	-
1251	0520-00001-V20	EQT00000000090	L289	5-90	467054.968	3336126.574	1.260E-03	30.480	366.483	6.035	0.457	-
1251	0520-00001-V20	EQT00000000114	L290	9-01	467059.772	3336123.235	1.260E-03	14.326	310.928	31.059	0.152	-
1251	0520-00001-V20	EQT00000000103	L291	6-90	467058.819	3336126.562	1.260E-03	30.480	366.483	6.035	0.457	-
1251	0520-00001-V20	EQT00000000063	L292	3-90	467054.981	3336131.006	1.260E-03	30.480	366.483	6.035	0.457	-
1251	0520-00001-V20	EQT00000000052	L293	25-90	467049.226	3336138.780	1.260E-03	10.668	299.817	7.864	0.305	-
1251	0520-00001-V20	EQT00000000075	L294	4-90	467058.833	3336130.995	1.260E-03	30.480	366.483	6.035	0.457	-
1251	0520-00001-V20	EQT00000000019	L295	1-90	467054.997	3336136.547	1.260E-03	24.384	366.483	6.035	0.457	-
1251	0520-00001-V20	EQT00000000051	L296	24-90	467067.480	3336124.320	1.260E-03	30.175	300.372	7.864	0.305	-
1251	0520-00001-V20	EQT00000000043	L297	2-90	467058.849	3336136.535	1.260E-03	30.480	366.483	6.035	0.457	-
1251	0520-00001-V20	EQT00000000037	L298	14-90	467067.499	3336130.969	1.260E-03	32.918	301.483	7.894	0.305	-
1251	0520-00001-V20	EQT00000000119	L299	5-06	467267.000	3335918.000	1.890E-02	4.572	302.594	2.499	1.829	-
1251	0520-00001-V20	EQT00000000054	L300	27-90	467092.510	3336122.029	1.260E-03	21.336	313.150	29.992	0.213	-
1251	0520-00001-V20	EQT00000000111	L301	8-90	467079.078	3336138.691	1.496E-05	15.545	418.706	20.117	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3439	0520-00048-V7	FUG00000000016	L302	28	467871.681	3335207.845	9.786E-03	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
37103	0560-00096-09	EQT00000000039	L303	PE-04	467295.526	3321918.256	1.134E-03	2.438	672.039	8.809	0.076	-
37103	0560-00096-09	EQT00000000040	L304	HT-02	467295.526	3321918.256	3.780E-04	7.620	449.817	0.073	0.204	-
37103	0560-00096-09	EQT00000000043	L305	CE-09	467295.526	3321918.256	5.670E-03	2.134	727.594	11.613	0.253	-
1251	0520-00001-V20	EQT00000000040	L306	2-02	467080.078	3336150.877	1.260E-03	24.384	310.928	25.878	0.152	-
1251	0520-00001-V20	EQT00000000016	L307	1-81	467051.285	3336183.099	1.260E-03	8.534	303.150	15.850	0.213	-
1251	0520-00001-V20	EQT00000000049	L308	22-90	467119.454	3336115.299	1.260E-03	22.860	366.483	25.969	0.213	-
1251	0520-00001-V20	EQT00000000011	L309	1-02	467085.856	3336150.860	1.260E-03	24.384	310.928	25.878	0.152	-
1251	0520-00001-V20	EQT00000000108	L310	7-90	467118.510	3336121.951	1.260E-03	24.384	315.372	14.569	0.610	-
1251	0520-00001-V20	EQT00000000027	L311	11-01	467118.517	3336124.167	2.992E-04	35.662	1088.706	6.462	0.762	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000072	L312	4-78	467138.023	3336110.036	3.141E-03	26.518	449.817	20.117	0.914	
1251	0520-00001-V20	EQT00000000070	L313	4-01	467141.575	3336106.368	1.260E-03	42.977	310.928	24.262	0.610	-
1251	0520-00001-V20	EQT00000000121	L314	1-06	467129.000	3336120.000	8.975E-05	15.240	1088.706	3.901	1.524	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000100	L315	6-01	467198.235	3336054.117	1.260E-03	14.021	310.928	13.990	0.253	-
1251	0520-00001-V20	EQT00000000025	L316	10-01	467142.562	3336114.122	8.975E-04	44.501	1088.706	3.231	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000044	L317	2-91	467132.010	3336128.005	3.314E-01	26.518	347.039	25.268	0.914	-
1251	0520-00001-V20	EQT00000000010	L318	1-01	467146.420	3336116.327	1.260E-03	28.042	310.928	13.990	0.253	-
1251	0520-00001-V20	EQT00000000194	L319	2-21	467146.420	3336116.327	1.260E-04	9.144	310.928	9.449	1.000	-
1251	0520-00001-V20	EQT00000000088	L320	5-01	467141.628	3336124.098	1.260E-03	38.100	338.706	3.658	0.405	-
1251	0520-00001-V20	EQT00000000039	L321	2-01	467147.390	3336118.540	1.260E-03	27.737	310.928	9.327	0.253	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3439	0520-00048-V7	FUG00000000001	L322	1-87	467845.178	3335300.230	1.348E-03	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	FUG00000000021	L323	1-14	467845.178	3335300.230	1.050E-04	1.000	298.150	0.001	1.000	
3439	0520-00048-V7	FUG00000000022	L324	2-14	467845.178	3335300.230	4.893E-03	1.000	298.150	0.001	1.000	
3439	0520-00048-V7	FUG00000000024	L325	1-16	467845.178	3335300.230	1.628E-03	1.000	298.150	0.001	1.000	
1251	0520-00001-V20	EQT00000000062	L326	3-87	467053.354	3336230.743	2.520E-03	29.870	320.372	28.468	0.152	-
1251	0520-00001-V20	EQT00000000031	L327	12-81	467056.253	3336234.058	1.260E-03	29.870	299.261	29.931	0.168	-
1251	0520-00001-V20	EQT00000000154	L328	5-12	467342.025	3335929.911	3.654E-02	6.401	308.150	17.983	0.183	-
1251	0520-00001-V20	EQT00000000122	L329	2-06	467209.980	3336084.998	1.795E-04	22.860	1088.706	7.132	1.524	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000064	L330	3-91	467055.346	3336252.899	1.260E-03	32.309	302.594	12.863	0.152	-
1251	0520-00001-V20	EQT00000000107	L331	7-87	467130.239	3336179.538	5.984E-05	14.326	337.594	19.812	0.213	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000024	L332	1-99	467182.083	3336127.301	1.260E-03	22.860	308.150	20.726	0.241	-
1251	0520-00001-V20	EQT00000000018	L333	1-89	467168.648	3336142.855	1.260E-03	10.668	302.594	20.635	0.171	-
1251	0520-00001-V20	EQT00000000102	L334	6-87	467134.090	3336179.527	5.984E-05	14.326	337.594	19.812	0.213	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000110	L335	8-87	467130.255	3336185.079	5.984E-05	14.326	337.594	19.812	0.213	
1251	0520-00001-V20	EQT00000000105	L336	7-73	467186.895	3336126.179	8.681E-01	60.655	560.928	11.918	1.524	-
1251	0520-00001-V20	EQT00000000048	L337	2-97	467118.739	3336198.411	2.520E-03	7.010	319.817	3.993	0.405	-
1251	0520-00001-V20	EQT00000000089	L338	5-87	467137.942	3336179.515	5.984E-05	14.326	337.594	19.812	0.213	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000116	L339	9-87	467134.107	3336185.067	5.984E-05	14.326	337.594	19.812	0.213	
1251	0520-00001-V20	EQT00000000098	L340	55-90	467148.512	3336171.727	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000101	L341	6-83	467147.555	3336173.946	1.260E-03	30.480	302.594	17.983	0.183	-
1251	0520-00001-V20	EQT00000000074	L342	4-87	467137.959	3336185.056	5.984E-05	14.326	337.594	19.812	0.213	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000097	L343	54-90	467148.522	3336175.051	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000094	L344	51-90	467154.290	3336171.710	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000096	L345	53-90	467148.532	3336178.376	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000085	L346	47-90	467155.253	3336171.707	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000084	L347	46-90	467154.300	3336175.034	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000093	L348	50-90	467154.300	3336175.034	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000095	L349	52-90	467148.542	3336181.700	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000083	L350	45-90	467154.309	3336178.358	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000087	L351	49-90	467154.309	3336178.358	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000081	L352	43-90	467161.030	3336171.689	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000078	L353	40-90	467154.319	3336181.683	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000082	L354	44-90	467154.319	3336181.683	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000086	L355	48-90	467154.319	3336181.683	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000068	L356	38-90	467162.960	3336172.792	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000080	L357	42-90	467161.040	3336175.014	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000067	L358	37-90	467164.886	3336172.786	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000079	L359	41-90	467161.050	3336178.338	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000069	L360	39-90	467162.976	3336178.332	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000021	L361	1-93	467208.000	3336130.999	3.830E-01	26.518	347.039	27.737	0.914	-
1251	0520-00001-V20	EQT00000000066	L362	36-90	467164.902	3336178.327	1.260E-03	31.394	388.706	10.759	0.366	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

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1251	0520-00001-V20	EQT00000000034	L363	13-81	467112.105	3336233.891	1.260E-03	24.384	299.261	17.374	0.219	-
1251	0520-00001-V20	EQT00000000099	L364	56-90	467160.127	3336191.638	1.260E-03	13.411	294.261	26.426	0.213	-
1251	0520-00001-V20	EQT00000000023	L365	1-97	467176.461	3336179.400	1.260E-03	21.641	308.150	11.491	0.229	-
1251	0520-00001-V20	EQT00000000109	L366	7-93	467183.205	3336180.488	6.300E-03	2.438	299.817	4.145	0.305	-
1251	0520-00001-V20	EQT00000000053	L367	26-90	467191.865	3336178.246	1.134E-02	10.363	299.817	9.540	0.274	-
1251	0520-00001-V20	EQT00000000106	L368	7-83	467192.858	3336188.216	3.780E-02	9.449	326.483	18.471	0.213	-
1251	0520-00001-V20	EQT00000000046	L369	2-94	467154.518	3336248.170	1.978E-01	19.812	327.594	10.058	0.914	-
1251	0520-00001-V20	EQT00000000015	L370	1-79	467113.240	3336291.510	3.654E-02	24.384	308.150	17.983	0.183	-
1251	0520-00001-V20	EQT00000000192	L371	1-19	467268.800	3336143.443	1.159E-01	12.192	435.928	16.459	1.524	-
1251	0520-00001-V20	EQT00000000193	L372	1-21	467268.800	3336143.443	1.071E-01	30.480	427.039	14.051	1.067	-
37103	0560-00096-09	EQT00000000004	L373	16-98-HT-BS	467100.000	3321500.000	3.780E-04	7.620	449.817	0.073	0.204	-
37103	0560-00096-09	EQT00000000023	L374	PE-03	467100.000	3321500.000	3.780E-04	2.438	672.039	8.809	0.076	-
37103	0560-00096-09	EQT00000000031	L375	GR-01	467100.000	3321500.000	7.560E-04	6.096	449.817	1.524	0.152	-
37103	0560-00096-09	EQT00000000033	L376	HT-01	467100.000	3321500.000	3.780E-04	7.620	449.817	0.073	0.204	-
37103	0560-00096-09	EQT00000000036	L377	CE-06	467100.000	3321500.000	1.260E-04	2.134	727.594	11.613	0.253	-
37103	0560-00096-09	EQT00000000037	L378	CE-07	467100.000	3321500.000	7.434E-03	2.134	727.594	11.613	0.253	-
1251	0520-00001-V20	FUG00000000005	L379	F2	467179.688	3336292.419	1.260E-03	12.192	298.706	0.001	1.000	-
43304	0520-00206-08	EQT00000000023	L380	BO-101	466948.496	3336553.855	2.520E-03	6.096	505.372	8.534	0.610	-
1251	0520-00001-V20	EQT00000000045	L381	2-93	467207.637	3336300.093	1.930E-03	24.384	422.039	24.750	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000017	L382	H-103	469128.782	3333568.542	2.772E-02	4.572	497.039	13.411	0.610	-
3585	0520-00050-V18	EQT00000000070	L383	P-049	469077.835	3333673.846	8.630E-05	1.524	699.817	0.001	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000012	L384	CT-100	469065.607	3333709.451	1.260E-03	9.144	297.594	0.001	1.000	-
3585	0520-00050-V18	EQT00000000072	L385	C-55	469135.905	3333566.971	1.151E-04	1.524	699.817	0.001	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000020	L386	H-205	469128.841	3333589.596	1.260E-02	26.975	560.928	6.309	0.610	-
3585	0520-00050-V18	EQT00000000021	L387	H-501	469128.841	3333589.596	2.596E-01	53.340	533.150	7.620	2.438	-
3585	0520-00050-V18	EQT00000000051	L388	H-701	469128.841	3333589.596	1.777E-01	30.480	667.594	3.048	1.524	-
3585	0520-00050-V18	EQT00000000071	L389	P-050	469050.046	3333758.917	8.630E-05	1.524	699.817	0.001	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000018	L390	H-201	469126.961	3333606.223	6.300E-02	20.117	389.817	5.480	1.585	-
3585	0520-00050-V18	EQT00000000019	L391	H-204	469127.054	3333639.467	1.235E-01	41.758	527.594	3.200	1.585	-
3585	0520-00050-V18	EQT00000000007	L392	32-G-3201	469155.810	3333589.520	1.784E-03	6.096	533.150	2.353	0.305	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000008	L393	50-G-5001	469155.810	3333589.520	3.236E-03	6.096	533.150	65.038	0.305	
3585	0520-00050-V18	EQT00000000009	L394	50-G-5002	469155.810	3333589.520	3.236E-03	6.096	533.150	65.038	0.305	
43304	0520-00206-08	EQT00000000017	L395	007	466966.591	3336615.080	7.560E-03	1.000	0.000	0.001	1.000	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

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1251	0520-00001-V20	EQT00000000155	L396	1-14	467411.738	3336186.789	2.301E-04	2.387	748.150	102.718	0.128	
1251	0520-00001-V20	EQT00000000156	L397	2-14	467411.738	3336186.789	6.041E-04	3.048	808.150	140.818	0.128	
1251	0520-00001-V20	EQT00000000157	L398	3-14	467411.738	3336186.789	1.007E-04	2.134	834.261	46.634	0.088	
1251	0520-00001-V20	EQT00000000158	L399	4-14	467411.738	3336186.789	1.151E-04	2.286	727.594	61.570	0.140	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000159	L400	5-14	467411.738	3336186.789	1.438E-05	1.036	755.372	20.726	0.064	
1251	0520-00001-V20	EQT00000000160	L401	6-14	467411.738	3336186.789	6.041E-04	2.438	808.150	140.818	0.128	
1251	0520-00001-V20	EQT00000000161	L402	7-14	467411.738	3336186.789	5.610E-04	2.652	727.594	175.870	0.152	
1251	0520-00001-V20	EQT00000000162	L403	8-14	467411.738	3336186.789	1.309E-03	2.377	727.594	79.858	0.116	
1251	0520-00001-V20	EQT00000000163	L404	9-14	467411.738	3336186.789	5.610E-04	2.438	744.261	106.070	0.128	
1251	0520-00001-V20	EQT00000000164	L405	10-14	467411.738	3336186.789	4.027E-04	2.134	755.372	165.506	0.088	
1251	0520-00001-V20	EQT00000000170	L406	16-14	467411.738	3336186.789	1.438E-05	0.305	807.594	2025.701	0.024	
1251	0520-00001-V20	EQT00000000171	L407	17-14	467411.738	3336186.789	1.438E-05	0.305	807.594	2025.701	0.024	
1251	0520-00001-V20	EQT00000000172	L408	18-14	467411.738	3336186.789	9.781E-04	1.920	749.817	199.644	0.128	
27518	2461-V7	EQT00000000037	L409	20-96A	465100.045	3338104.753	1.764E-02	6.096	299.817	14.356	1.000	-
27518	2461-V7	EQT00000000038	L410	20-96B	465100.045	3338104.753	1.764E-02	6.096	299.817	14.356	1.000	-
3585	0520-00050-V18	EQT00000000015	L411	F-400	469141.953	3333800.102	1.016E+00	30.480	1255.372	20.000	5.770	LDEQ flare default stack velocity was utilized. The stack diameter was calculated based on permitted heat input of 1,082 MMBTU/hr.
27518	2461-V7	EQT00000000016	L412	18-96	465181.112	3338103.941	1.890E-02	4.572	310.928	17.739	0.533	-
27518	2461-V7	EQT00000000017	L413	19-96	465181.112	3338103.941	4.032E-02	4.572	310.928	17.739	0.533	-
43304	0520-00206-08	EQT00000000001	L414	BO-100	466967.856	3336747.719	2.520E-03	6.096	505.372	8.534	0.610	-
27518	2461-V7	EQT00000000011	L415	13-96	465298.031	3338053.927	7.560E-03	4.572	310.928	14.082	0.457	-
27518	2461-V7	EQT00000000045	L416	02-18	465298.031	3338053.927	1.260E-03	10.668	299.817	29.697	0.101	-
27518	2461-V7	EQT00000000010	L417	12-96	465299.090	3338053.923	7.560E-03	4.572	310.928	23.226	0.457	-
27518	2461-V7	EQT00000000044	L418	01-18	465299.090	3338053.923	1.260E-03	10.668	299.817	29.697	0.101	-
27518	2461-V7	EQT00000000007	L419	09-96	465259.148	3338088.845	1.260E-03	32.004	322.039	14.874	0.152	-
27518	2461-V7	EQT00000000008	L420	10-96	465259.148	3338088.845	1.260E-03	10.668	299.817	13.655	0.101	-
43304	0520-00206-08	EQT00000000002	L421	R-100	466981.749	3336756.543	7.560E-03	1.000	0.000	0.001	1.000	-
43304	0520-00206-08	EQT00000000020	L422	R-101	466981.749	3336756.543	7.560E-03	1.000	0.000	0.001	1.000	-
27518	2461-V7	EQT00000000013	L423	15-96	465310.968	3338064.967	6.300E-04	18.288	333.150	11.643	0.305	-
27518	2461-V7	EQT00000000012	L424	14-96	465310.971	3338065.964	1.260E-03	18.288	333.150	11.643	0.305	-
27518	2461-V7	EQT00000000015	L425	17-96	465313.869	3338069.058	5.040E-04	4.572	310.928	15.514	0.204	-
27518	2461-V7	EQT00000000014	L426	16-96	465314.931	3338069.941	5.040E-04	4.572	310.928	15.514	0.204	-
43304	0520-00206-08	EQT00000000027	L427	003	466980.774	3336784.581	2.520E-02	12.192	322.039	3.048	1.067	-
43304	0520-00206-08	EQT00000000028	L428	009	466980.774	3336784.581	2.520E-02	12.192	322.039	3.048	1.067	-
27518	2461-V7	EQT00000000004	L429	03-96	465258.995	3338131.952	1.260E-04	32.004	322.039	14.874	0.152	-
27518	2461-V7	EQT00000000005	L430	04-96	465258.995	3338131.952	3.780E-04	10.668	298.150	13.655	0.101	-
27518	2461-V7	EQT00000000003	L431	02-96	465676.120	3337928.073	3.780E-03	38.100	1144.261	4.322	0.558	-
3585	0520-00050-V18	EQT00000000059	L432	P-174	469269.800	3333899.670	1.424E-03	2.591	699.817	0.001	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
27518	2461-V7	EQT00000000002	L433	01-96	465676.068	3338003.869	1.260E-03	30.480	1144.261	11.046	0.357	-
27518	2461-V7	EQT00000000006	L434	08-96	465357.188	3338219.073	1.777E-01	13.716	310.928	8.250	8.534	The stack velocity is calculated based on the permitted flow rate and stack diameter.
3585	0520-00050-V18	CON00000000003	L435	MVCU	469552.928	3333725.155	3.780E-02	15.240	810.928	10.668	2.591	-
3585	0520-00050-V18	EQT00000000058	L436	EMERG	469552.928	3333725.155	3.596E-04	1.524	699.817	0.001	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000060	L437	P-402	469552.928	3333725.155	1.151E-04	1.524	699.817	0.001	0.076	
3585	0520-00050-V18	EQT00000000061	L438	Bz-ThOx	469552.928	3333725.155	2.520E-03	7.620	1088.706	11.162	0.305	-
3585	0520-00050-V18	EQT00000000063	L439	H-501A	469552.928	3333725.155	1.021E-01	52.426	627.594	10.506	1.777	-
3585	0520-00050-V18	EQT00000000064	L440	H-901	469552.928	3333725.155	4.788E-02	48.463	610.928	9.367	1.372	-

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18070	0520-00146-V6	EQT00000000016	L441	20-90	465514.240	3338331.700	2.019E-04	4.572	755.372	0.396	0.134	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
8372	0520-00088-06	EQT00000000023	L442	TKCLEAN	467901.781	3336346.356	2.016E-02	1.000	0.000	0.001	1.000	-
8372	0520-00088-06	EQT00000000026	L443	EFP	467901.781	3336346.356	2.898E-02	1.000	0.000	0.001	1.000	-
8372	0520-00088-06	EQT00000000027	L444	EG	467901.781	3336346.356	5.040E-03	1.000	0.000	0.001	1.000	-
18070	0520-00146-V6	EQT00000000007	L445	4-90	465495.240	3338430.600	5.684E-04	3.048	855.372	75.590	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
18070	0520-00146-V6	EQT00000000006	L446	1-97	465635.880	3338356.100	7.434E-02	22.860	438.706	6.340	1.676	-
18070	0520-00146-V6	EQT00000000005	L447	3-90	465644.870	3338359.000	6.804E-02	22.860	429.261	16.642	1.448	-
18070	0520-00146-V6	EQT00000000017	L448	25-90	465639.690	3338412.600	1.222E-01	15.011	310.928	0.001	1.000	-
6164	0520-00145-V16	EQT00000000043	L449	WPT6-96	465210.285	3338680.964	1.777E-01	30.480	441.483	19.873	1.402	-
6164	0520-00145-V16	EQT00000000044	L450	WPT7-96	465210.302	3338686.505	1.777E-01	30.480	441.483	19.873	1.402	-
18070	0520-00146-V6	EQT00000000004	L451	2-90	465594.400	3338454.300	9.954E-02	39.014	435.928	3.932	1.905	-
18070	0520-00146-V6	EQT00000000003	L452	1-90	465590.200	3338459.000	4.284E-02	41.148	430.372	4.450	1.219	-
6164	0520-00145-V16	EQT00000000042	L453	WPT5-96	465204.557	3338696.496	1.310E-01	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000015	L454	EGN-2	470532.799	3331575.285	9.261E-03	7.001	848.150	49.122	0.600	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emissions and stack parameters were obtained from option 2.
188813	0520-00476-V1	EQT00000000014	L455	EGN-1	470532.533	3331584.151	9.261E-03	7.001	848.150	49.122	0.600	
188813	0520-00476-V1	EQT00000000001	L456	F-101	470570.964	3331437.222	2.545E+00	65.000	441.500	37.230	3.500	
6164	0520-00145-V16	EQT00000000040	L457	WPT3-96	465204.687	3338737.497	1.310E-01	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000046	L458	CT2	470543.205	3331647.839	1.159E-01	22.000	310.928	8.501	6.721	-
188813	0520-00476-V1	EQT00000000047	L459	CT3	470543.205	3331647.839	7.686E-02	22.000	310.928	8.501	6.721	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	EQT00000000009	L460	F-341A	470573.430	3331566.533	8.918E-01	65.000	571.500	12.210	3.500	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emissions and stack parameters were obtained from option 2.
18070	0520-00146-V6	EQT00000000015	L461	17-90	465528.190	3338566.200	1.260E-03	60.655	1273.000	20.000	0.610	LDEQ flare default stack velocity and stack temperature were utilized.
6164	0520-00145-V16	EQT00000000038	L462	WPT1-96	465203.855	3338778.501	1.310E-01	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000010	L463	F-341B	470597.514	3331566.469	6.161E-01	55.001	571.483	37.402	1.999	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	EQT00000000036	L464	F-103	470614.294	3331536.837	6.665E-01	64.999	433.150	5.483	3.840	
188813	0520-00476-V1	EQT00000000048	L465	F-343B	470629.222	3331607.273	8.230E-03	64.999	404.817	23.037	2.499	

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188813	0520-00476-V1	EQT00000000017	L466	FPE-2	470617.087	3331680.885	1.298E-03	3.499	848.150	27.508	0.299	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emissions and stack parameters were obtained from option 2.
185639	0520-00481-V0	EQT00000000023	L467	P-0803A	470844.700	3330600.300	2.589E-04	6.096	725.928	28.926	0.305	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
185639	0520-00481-V0	EQT00000000024	L468	P-0803B	470846.460	3330600.829	2.589E-04	6.096	725.928	28.926	0.305	
188813	0520-00476-V1	EQT00000000016	L469	FPE-1	470632.404	3331680.844	1.298E-03	3.499	848.150	27.508	0.299	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emissions and stack parameters were obtained from option 2.
188813	0520-00476-V1	EQT00000000035	L470	F-102	470689.787	3331523.449	1.457E+00	64.999	441.483	37.234	3.499	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	EQT00000000037	L471	F-342	470682.102	3331567.794	8.921E-01	64.999	571.483	12.213	3.499	
188813	0520-00476-V1	EQT00000000038	L472	F-343A	470677.643	3331593.625	8.442E-02	55.001	405.372	23.037	2.499	
6164	0520-00145-V16	EQT00000000041	L473	WPT4-96	465184.017	3338898.242	1.310E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000029	L474	9-89	465533.922	3338728.701	4.188E-04	4.572	755.372	3.048	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
188813	0520-00476-V1	EQT00000000033	L475	CT1	470709.687	3331652.381	6.174E-02	15.600	310.928	8.501	9.860	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
6164	0520-00145-V16	EQT00000000039	L476	WPT2-96	465204.361	3338938.070	1.310E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000037	L477	9-01	465694.562	3338683.872	3.276E-02	13.716	929.817	36.576	2.438	-
6164	0520-00145-V16	EQT00000000026	L478	6-89	465601.380	3338749.544	1.877E-01	17.678	313.706	7.590	9.754	-
17269	0520-00179-02	EQT00000000039	L479	EP-6-95-01	467200.000	3337600.000	5.040E-03	10.912	552.594	0.091	0.549	-
6164	0520-00145-V16	EQT00000000047	L480	WPT10-96	465410.294	3338908.608	9.723E-04	4.572	755.372	0.305	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000054	L481	WPT38-96	465417.984	3338966.095	2.416E-04	6.096	333.150	0.001	0.305	
6164	0520-00145-V16	EQT00000000105	L482	WPT1-10	465417.984	3338966.095	1.285E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000110	L483	1-13	465417.984	3338966.095	1.147E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000111	L484	WPT1-13	465417.984	3338966.095	1.625E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000112	L485	WPT1-14	465417.984	3338966.095	5.034E-03	1.000	0.000	0.001	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000116	L486	WPT1-16	465417.984	3338966.095	4.662E-02	17.678	313.706	7.882	9.144	-
6164	0520-00145-V16	EQT00000000117	L487	1-18	465417.984	3338966.095	5.799E-04	12.192	0.000	0.001	2.286	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile,

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6164	0520-00145-V16	EQT00000000118	L488	7-18	465417.984	3338966.095	2.301E-04	3.048	0.000	0.001	7.620	averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000129	L489	3-20	465417.984	3338966.095	2.520E-02	1.000	0.000	0.001	1.000	-
6164	0520-00145-V16	EQT00000000130	L490	WPT1-19	465417.984	3338966.095	2.301E-04	1.000	0.000	0.001	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000131	L491	4-20	465417.984	3338966.095	2.520E-02	1.000	0.000	0.001	1.000	-
6164	Regper - Boiler	EQT00000000133	L492	WPT1-21	465417.984	3338966.095	5.418E-02	1.000	0.000	0.001	1.000	-
682	0520-00119-V7	ARE00000000002	L493	AREA2	467327.010	3337582.949	1.386E-01	1.000	0.000	0.001	1.000	-
682	0520-00119-V7	EQT00000000019	L494	Eng-1	467327.010	3337582.949	3.596E-04	1.000	0.000	0.001	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000045	L495	WPT8-96	465415.348	3338985.053	2.444E-01	17.678	313.706	7.590	9.754	-
6164	0520-00145-V16	EQT00000000017	L496	31-85	465761.362	3338802.234	1.978E-01	30.480	477.594	18.288	1.402	-
6164	0520-00145-V16	EQT00000000036	L497	1-95	465739.343	3338842.195	1.310E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000023	L498	1-89F	465766.324	3338849.868	1.512E-01	43.586	388.706	14.630	1.524	-
188813	0520-00476-V1	EQT00000000012	L499	F-461	470921.531	3331725.065	1.260E-03	64.999	1273.150	1.859	0.213	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	EQT00000000039	L500	F-462	470921.531	3331725.065	9.954E-04	64.999	1273.150	1.859	0.213	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emissions and stack parameters were obtained from option 2.
188813	0520-00476-V1	EQT00000000040	L501	F-463	470921.531	3331725.065	1.260E-03	64.999	1273.150	1.859	0.213	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
6164	0520-00145-V16	EQT00000000028	L502	8-89	465567.500	3338997.872	6.208E-04	4.572	755.372	0.914	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000025	L503	4-89	465757.939	3338939.653	1.386E-01	67.562	644.261	46.848	1.219	-
185639	0520-00481-V0	EQT00000000028	L504	RH-1001	471258.590	3330498.990	6.300E-03	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000001	L505	GT-1301A	471264.700	3330518.580	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000002	L506	GT-1301B	471264.220	3330550.640	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000013	L507	H-1603	471280.050	3330449.269	1.084E-01	54.864	422.039	20.361	1.219	-
6164	0520-00145-V16	EQT00000000024	L508	2-89	465761.974	3338998.371	1.386E-01	30.480	422.039	18.288	1.402	-
185639	0520-00481-V0	EQT00000000025	L509	P-0801A	471324.170	3330356.499	1.151E-04	6.096	838.150	29.688	0.204	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
185639	0520-00481-V0	EQT00000000026	L510	P-0801B	471326.130	3330356.570	1.151E-04	6.096	838.150	29.688	0.204	
185639	0520-00481-V0	EQT00000000009	L511	B-1101	471296.120	3330589.510	8.820E-03	15.240	394.261	9.653	0.914	-
6164	0520-00145-V16	EQT00000000022	L512	1-89E	465766.912	3339038.249	1.512E-01	43.586	388.706	14.630	1.524	-

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6164	0520-00145-V16	EQT00000000021	L513	1-89D	465766.974	3339058.195	1.512E-01	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000020	L514	1-89C	465767.005	3339068.168	1.512E-01	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000019	L515	1-89B	465767.036	3339078.141	1.512E-01	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000018	L516	1-89A	465767.071	3339089.222	1.512E-01	43.586	388.706	14.630	1.524	-
185639	0520-00481-V0	EQT00000000029	L517	RH-2001	471358.290	3330500.380	6.300E-03	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000003	L518	GT-2301A	471364.640	3330520.200	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000004	L519	GT-2301B	471364.080	3330552.169	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000014	L520	H-2603	471379.500	3330450.970	1.084E-01	54.864	422.039	20.361	1.219	-
185639	0520-00481-V0	EQT00000000010	L521	B-2101	471396.280	3330591.590	8.820E-03	15.240	394.261	9.653	0.914	-
133	0520-00011-V7	FUG00000000011	L522	6-01	471350.123	3331055.969	1.260E-02	1.000	0.000	0.001	1.000	-
185639	0520-00481-V0	EQT00000000030	L523	RH-3001	471458.250	3330502.190	6.300E-03	24.994	422.039	20.361	0.366	-
133	0520-00011-V7	FUG00000000012	L524	6-02	471375.169	3331054.795	7.686E-02	1.000	0.000	0.001	1.000	-
185639	0520-00481-V0	EQT00000000006	L525	GT-3301B	471463.800	3330553.800	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000015	L526	H-3603	471479.580	3330452.459	1.084E-01	54.864	422.039	20.361	1.219	-
133	0520-00011-V7	SCN00000000001	L527	Kiln AOS	471407.965	3330995.980	1.434E+00	53.035	1366.483	19.812	4.267	It is an alternate operating scenario of EQT00000000018. The emissions from EQT00000000018 are modeled under Model ID: L561. Therefore, this source was excluded.
133	0520-00011-V7	SCN00000000002	L528	Bake Furnace AOS	471407.965	3330995.980	5.292E-01	38.252	337.039	9.754	2.438	It is an alternate operating scenario of EQT00000000051. The emissions from EQT00000000051 are modeled under Model ID: L572. Therefore, this source was excluded.
133	0520-00011-V7	EQT00000000009	L529	1-01	471407.798	3331005.954	2.898E-02	21.336	302.594	22.860	0.457	-
185639	0520-00481-V0	EQT00000000021	L530	A-0721	471465.740	3330723.130	2.882E-02	32.918	1273.000	20.000	0.457	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled. LDEQ flare default stack velocity and stack temperature were utilized.
185639	0520-00481-V0	EQT00000000022	L531	A-0722	471466.530	3330722.240	1.549E-02	32.918	1273.000	20.000	0.610	
133	0520-00011-V7	EQT00000000017	L532	1-09	471407.117	3331114.551	4.158E-02	32.004	302.594	17.556	0.457	-
185639	0520-00481-V0	EQT00000000011	L533	B-3101	471495.730	3330592.980	8.820E-03	15.240	394.261	9.653	0.914	-
185639	0520-00481-V0	EQT00000000031	L534	RH-4001	471557.950	3330503.660	6.300E-03	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000007	L535	GT-4301A	471564.220	3330523.460	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000008	L536	GT-4301B	471563.650	3330555.340	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000016	L537	H-4603	471579.470	3330454.200	1.084E-01	54.864	422.039	20.361	1.219	-
133	0520-00011-V7	FUG00000000001	L538	1-10	471456.532	3331223.018	2.268E-02	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000088	L539	6-16	471438.000	3331348.000	4.603E-03	2.591	885.372	23.284	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
188813	0520-00476-V1	FUG00000000004	L540	PVRD	471119.443	3332619.680	1.260E-03	1.000	0.000	0.001	1.000	-
188813	0520-00476-V1	SCN00000000001	L541	F-101	471119.443	3332619.680	2.092E-02	1.000	0.000	0.001	1.000	Based on the November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was evaluated for three operating scenarios (options) in which option 2 was the worst-case for PM2.5 24-hr. Therefore the option 1 and 3 emission sources were excluded.
188813	0520-00476-V1	SCN00000000002	L542	F-341A	471119.443	3332619.680	5.064E-03	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000003	L543	F-341B	471119.443	3332619.680	5.064E-03	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000004	L544	F-461	471119.443	3332619.680	2.309E-02	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000005	L545	F-461	471119.443	3332619.680	3.038E-04	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000006	L546	F-102	471119.443	3332619.680	1.197E-02	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000007	L547	F-342	471119.443	3332619.680	7.332E-03	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000008	L548	F-462	471119.443	3332619.680	7.720E-02	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000009	L549	F-462	471119.443	3332619.680	2.624E-04	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000010	L550	F-103	471119.443	3332619.680	5.478E-03	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000011	L551	F-343A	471119.443	3332619.680	6.939E-04	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000012	L552	F-463	471119.443	3332619.680	5.239E-02	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000013	L553	F-463	471119.443	3332619.680	6.131E-03	1.000	0.000	0.001	1.000	
133	0520-00011-V7	EQT00000000010	L554	1-02	471515.750	3331024.512	6.300E-03	10.668	302.594	28.865	0.853	-
133	0520-00011-V7	EQT00000000012	L555	1-04	471511.039	3331065.524	4.158E-02	18.288	302.594	15.453	0.558	-
133	0520-00011-V7	FUG00000000005	L556	2-04	471459.756	3331351.551	3.780E-03	1.000	0.000	0.001	1.000	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
133	0520-00011-V7	EQT00000000086	L557	6-14	471449.000	3331406.000	1.295E-03	10.769	888.150	45.406	0.052	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
133	0520-00011-V7	FUG00000000004	L558	2-03	471447.448	3331434.691	6.678E-02	1.000	0.000	0.001	1.000	-
185639	0520-00481-V0	EQT00000000012	L559	B-4101	471596.120	3330594.370	8.820E-03	15.240	394.261	9.653	0.914	-
133	0520-00011-V7	EQT00000000087	L560	6-15	471393.000	3331700.000	3.812E-03	3.048	873.150	59.506	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
133	0520-00011-V7	EQT00000000018	L561	2-02	471452.319	3331455.733	2.912E+00	53.035	1366.483	19.812	4.267	-
133	0520-00011-V7	FUG00000000003	L562	2-01	471484.867	3331375.864	1.008E-02	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000011	L563	1-03	471534.316	3331125.302	3.528E-02	12.192	302.594	15.453	0.558	-
133	0520-00011-V7	EQT00000000021	L564	3-05	471526.978	3331268.268	5.040E-03	18.288	302.594	26.060	0.335	-
133	0520-00011-V7	FUG00000000006	L565	3-01	471552.752	3331176.228	1.260E-03	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000019	L566	3-03	471544.248	3331240.520	8.820E-03	10.973	302.594	24.079	0.671	-
133	0520-00011-V7	FUG00000000007	L567	3-02	471554.730	3331196.168	1.260E-03	4.572	302.594	15.240	0.762	-
133	0520-00011-V7	EQT00000000057	L568	5-10	471522.480	3331391.280	1.260E-03	5.060	302.594	14.387	0.549	-
133	0520-00011-V7	FUG00000000002	L569	1-11	471579.616	3331132.942	2.520E-03	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000024	L570	3-08	471556.806	3331253.785	1.512E-02	15.240	302.594	15.728	0.732	-
133	0520-00011-V7	EQT00000000063	L571	3-13	471561.606	3331247.124	8.820E-03	4.572	302.594	15.240	0.762	-
133	0520-00011-V7	EQT00000000051	L572	5-01	471522.749	3331495.442	2.815E+00	38.252	337.039	9.754	2.438	-
133	0520-00011-V7	EQT00000000061	L573	3-12	471580.822	3331227.128	1.260E-04	10.668	302.594	25.878	0.152	-
133	0520-00011-V7	EQT00000000027	L574	3-11	471580.831	3331230.453	2.520E-03	0.610	338.706	29.688	0.101	-
133	0520-00011-V7	EQT00000000022	L575	3-07	471582.821	3331254.826	2.520E-02	9.144	366.483	20.117	1.372	-
133	0520-00011-V7	EQT00000000091	L576	2-09	471582.821	3331254.826	6.300E-03	9.144	366.483	20.117	1.372	-
133	0520-00011-V7	EQT00000000094	L577	6-18	471582.821	3331254.826	6.300E-03	9.144	366.483	20.117	1.372	-
185639	0520-00481-V0	EQT00000000027	L578	EG-0001	471713.200	3330448.860	4.315E-04	6.096	749.817	29.352	0.405	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
133	0520-00011-V7	FUG00000000017	L579	1-08A	471609.000	3331156.999	2.520E-04	23.470	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000055	L580	5-08	471553.443	3331443.281	7.106E-01	12.192	302.594	18.044	0.387	-
133	0520-00011-V7	EQT00000000013	L581	1-05	471613.355	3331140.611	5.292E-02	4.572	302.594	11.400	0.357	-
133	0520-00011-V7	EQT00000000016	L582	1-08	471609.559	3331162.783	1.260E-03	23.470	310.928	8.900	0.101	-
133	0520-00011-V7	EQT00000000056	L583	5-09	471555.364	3331441.060	7.106E-01	12.192	302.594	18.044	0.387	-
133	0520-00011-V7	EQT00000000054	L584	5-04	471551.559	3331459.908	1.512E-02	2.530	338.706	24.780	0.122	-
1250	2920-V4	EQT00000000242	L585	3(XXX)2	468162.045	3337666.043	2.999E-01	64.618	477.594	12.427	2.210	-
133	0520-00011-V7	FUG00000000016	L586	1-07A	471610.000	3331192.000	5.040E-04	23.470	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000015	L587	1-07	471609.656	3331200.459	1.260E-03	23.470	310.928	8.900	0.101	-
133	0520-00011-V7	EQT00000000090	L588	5-01b	471527.000	3331603.000	2.815E+00	38.252	311.483	16.764	2.134	-
133	0520-00011-V7	FUG00000000015	L589	1-06A	471611.000	3331225.000	1.260E-03	23.470	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000014	L590	1-06	471609.744	3331234.810	1.260E-03	23.470	310.928	8.900	0.101	-
133	0520-00011-V7	EQT00000000025	L591	3-09	471611.746	3331263.616	6.300E-03	9.144	302.594	14.082	0.457	-
133	0520-00011-V7	FUG00000000010	L592	5-13	471571.827	3331474.261	2.079E-01	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000026	L593	3-10	471614.679	3331280.230	1.260E-04	9.144	338.706	11.369	0.204	-
133	0520-00011-V7	EQT00000000052	L594	5-02	471587.355	3331518.546	1.260E-04	0.610	338.706	25.878	0.152	-
185639	0520-00481-V0	EQT00000000005	L595	GT-3301A	471764.510	3330521.910	4.536E-02	64.922	458.150	26.021	2.743	-
133	0520-00011-V7	EQT00000000030	L596	4-02	471674.044	3331138.239	1.386E-02	27.432	394.261	23.439	0.792	-
37119	2338-V4	EQT00000000011	L597	PG-1-94	466839.934	3338867.958	1.260E-04	10.668	1273.000	20.000	0.152	LDEQ flare default stack velocity and stack temperature were utilized.
37119	2338-V4	EQT00000000012	L598	PG-6-94	466839.934	3338867.958	8.199E-04	2.438	659.261	0.001	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
37119	2338-V4	EQT00000000013	L599	PG-7-94	466839.934	3338867.958	8.199E-04	2.438	659.261	0.001	0.101	

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AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
133	0520-00011-V7	EQT00000000053	L600	5-03	471600.843	3331518.511	1.260E-04	12.192	310.928	25.878	0.152	-
133	0520-00011-V7	EQT00000000050	L601	4-24	471661.107	3331352.138	1.260E-02	9.144	588.706	10.363	0.457	-
133	0520-00011-V7	EQT00000000092	L602	4-22	471661.107	3331352.138	3.780E-03	9.144	588.706	10.363	0.457	-
133	0520-00011-V7	EQT00000000093	L603	4-23	471661.107	3331352.138	3.780E-03	9.144	588.706	10.363	0.457	-
133	0520-00011-V7	EQT00000000033	L604	4-05	471681.273	3331326.600	1.260E-04	27.432	310.928	28.743	0.457	-
133	0520-00011-V7	EQT00000000036	L605	4-08	471688.948	3331314.391	1.260E-04	18.288	310.928	20.452	0.152	-
133	0520-00011-V7	EQT00000000037	L606	4-09	471689.912	3331314.388	1.260E-04	18.288	310.928	20.452	0.152	-
133	0520-00011-V7	FUG00000000009	L607	4-29	471689.957	3331332.118	1.260E-04	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000038	L608	4-10	471697.647	3331325.449	1.260E-03	27.432	310.928	13.198	0.579	-
133	0520-00011-V7	EQT00000000035	L609	4-07	471700.546	3331328.766	1.260E-03	27.432	310.928	15.392	0.366	-
133	0520-00011-V7	EQT00000000034	L610	4-06	471705.363	3331328.754	1.260E-03	27.432	310.928	15.392	0.366	-
133	0520-00011-V7	EQT00000000029	L611	4-01	471700.652	3331369.766	3.780E-03	27.432	310.928	15.758	0.549	-
133	0520-00011-V7	EQT00000000031	L612	4-03	471700.652	3331369.766	1.260E-03	27.432	310.928	17.922	0.579	-
133	0520-00011-V7	EQT00000000032	L613	4-04	471700.652	3331369.766	1.260E-03	27.432	310.928	17.922	0.579	-
133	0520-00011-V7	EQT00000000039	L614	4-11	471711.206	3331353.117	2.470E-01	18.288	310.928	22.555	1.219	-
1250	3010-V6	EQT00000000352	L615	3(XXIX)3	466425.104	3339281.999	9.402E+01	91.440	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
1250	2796-V14	EQT00000000417	L616	3(IX)37-250	468433.000	3337642.000	7.434E-02	1.000	0.000	0.001	1.000	-
212290	0520-00509-V0	EQT00000000010	L617	3101B	471816.759	3331339.438	8.051E-01	60.960	1273.150	20.117	0.113	-
1250	2935-V11	EQT00000000315	L618	3(XX-K)1-4	468317.989	3337920.018	3.452E-05	6.096	298.150	0.018	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1250	2935-V11	EQT00000000312	L619	3(XX-K)1-1	468381.011	3337871.965	3.452E-05	6.096	298.150	0.018	0.152	
1250	2935-V11	EQT00000000313	L620	3(XX-K)1-2	468289.035	3337962.986	3.452E-05	6.096	298.150	0.018	0.152	
1250	2935-V11	EQT00000000314	L621	3(XX-K)1-3	468302.033	3337962.949	3.452E-05	6.096	298.150	0.018	0.152	
1250	2935-V11	EQT00000000536	L622	SSA	468199.894	3338067.963	1.270E-03	1.000	0.000	0.001	1.000	
1250	2796-V14	EQT00000000418	L623	3(IX)37-PTU	468649.000	3337676.999	5.922E-02	1.000	0.000	0.001	1.000	-
1250	2796-V14	EQT00000000066	L624	3(IX)38	468512.000	3337851.999	6.174E-02	15.240	1273.150	20.001	1.430	-
1250	3010-V6	EQT00000000341	L625	3(MISC)CT12	468295.921	3338079.985	8.685E-04	10.058	298.150	12.009	9.144	Updated the stack temperature based on other permitted cooling towers. Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	3010-V6	EQT00000000341	L626	3(MISC)CT12	468295.921	3338079.985	3.843E-01	12.192	298.150		30.480	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L625. Therefore, this source was excluded from this modeling analysis.
1250	3010-V6	EQT00000000340	L627	3(MISC)CT7	468264.792	3338136.146	1.589E-03	10.058	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	3010-V6	EQT00000000340	L628	3(MISC)CT7	468264.792	3338136.146	7.031E-01	12.192	298.150		30.480	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L627. Therefore, this source was excluded from this modeling analysis.
212290	0520-00509-V0	EQT00000000031	L629	C702JB	471824.844	3332126.179	3.226E-01	64.999	688.706	18.136	3.706	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3351	0520-00098-V9	EQT00000000020	L630	E-21	472030.000	3331228.000	3.780E-03	6.096	394.261	6.096	0.396	-
212290	0520-00509-V0	EQT00000000030	L631	C702JA	471823.859	3332155.436	3.226E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000025	L632	C701JB	471824.873	3332213.055	3.200E-01	64.999	466.483	28.834	3.048	-
212290	0520-00509-V0	EQT00000000024	L633	C701JA	471826.001	3332239.537	3.200E-01	64.999	466.483	28.834	3.048	-
3351	0520-00098-V9	EQT00000000042	L634	VSH-1	472000.000	3331537.000	2.520E-03	10.058	422.039	13.801	0.253	-
3351	0520-00098-V9	EQT00000000013	L635	E-14	472046.000	3331333.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000014	L636	E-15	472046.000	3331333.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000015	L637	E-16	472046.000	3331333.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000016	L638	E-17	472046.000	3331336.000	8.946E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000017	L639	E-18	472046.000	3331339.000	8.946E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000018	L640	E-19	472046.000	3331341.999	8.946E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000019	L641	E-20	472046.000	3331345.000	8.946E-02	13.106	288.706	8.230	0.762	-
1250	3010-V6	EQT00000000538	L642	PCD	466995.531	3339257.773	1.121E-01	1.000	0.000	0.001	1.000	Based on the Title V Permit Modification submitted to LDEQ on July 18, 2019. The portable thermal oxidizer/vapor combustor (PTO/VC) is only used during turnaround or other maintenance activities. The PTO/VC will be brought onsite on an as-needed basis. Therefore, this source was excluded.
1250	3010-V6	EQT00000000539	L643	PF	466995.531	3339257.773	9.408E+01	1.000	0.000	0.001	1.000	Based on the Title V Permit Modification submitted to LDEQ on July 18, 2019. The portable flare is only used during turnaround or other maintenance activities when one or more flares are down. Therefore, this source was excluded.
204624	7777-00902-ACI-00	EQT00000000001	L644	ACI	471876.712	3332180.012	5.368E-01	1.000	0.000	0.001	1.000	-
1250	2935-V11	EQT00000000293	L645	3(XX-B)1	468356.000	3338155.000	7.560E-02	45.720	922.039	21.196	1.753	-
1250	2935-V11	EQT00000000316	L646	3(XX-K)2-1	468306.963	3338202.955	1.058E-01	1.000	0.000	0.001	1.000	-
1250	2935-V11	EQT00000000317	L647	3(XX-K)2-2	468306.963	3338202.955	1.058E-01	1.000	0.000	0.001	1.000	-
1250	2920-V4	EQT00000000241	L648	3(XXVIII)1	468233.045	3338277.968	2.873E-01	45.720	435.928	9.616	2.438	-
1250	2935-V11	EQT00000000296	L649	3(VIII-A)1	468366.000	3338158.000	4.322E-01	76.200	355.372	6.337	1.509	-
1250	2935-V11	EQT00000000295	L650	3(VIII-A)2	468374.000	3338165.000	2.142E-02	9.144	477.594	5.066	0.762	-
3351	0520-00098-V9	EQT00000000004	L651	E-3	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000005	L652	E-4	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000006	L653	E-5	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000007	L654	E-6	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000008	L655	E-7	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000009	L656	E-8	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000010	L657	E-9	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000011	L658	E-10	472200.000	3330900.000	3.780E-03	6.096	394.261	6.096	0.396	-
3351	0520-00098-V9	EQT00000000012	L659	E-11	472200.000	3330900.000	3.780E-03	6.096	394.261	6.096	0.396	-
3351	0520-00098-V9	EQT00000000023	L660	E-1	472200.000	3330900.000	2.718E-03	15.240	741.483	18.288	2.896	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3351	0520-00098-V9	EQT00000000024	L661	E-22	472200.000	3330900.000	1.688E-01	51.816	450.928	6.096	2.438	-
3351	0520-00098-V9	EQT00000000025	L662	E-23	472200.000	3330900.000	1.688E-01	51.816	450.928	6.096	2.438	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3351	0520-00098-V9	EQT00000000026	L663	EG-1	472200.000	3330900.000	1.812E-03	3.048	422.039	0.001	0.152	
3351	0520-00098-V9	EQT00000000027	L664	EG-2	472200.000	3330900.000	6.473E-04	3.048	422.039	0.001	0.152	
3351	0520-00098-V9	EQT00000000028	L665	SEG	472200.000	3330900.000	3.164E-04	2.438	422.039	0.001	0.152	
3351	0520-00098-V9	EQT00000000088	L666	FL-1	472200.043	3330899.982	5.753E-07	18.288	1477.594	0.001	0.457	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3351	0520-00098-V9	EQT00000000030	L667	FWP-1	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000031	L668	FWP-2	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000032	L669	FWP-3	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000033	L670	FWP-4	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000034	L671	FWP-5	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000035	L672	FWP-6	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3351	0520-00098-V9	EQT00000000036	L673	FWP-7	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3351	0520-00098-V9	EQT00000000037	L674	FWP-8	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000038	L675	FWP-9	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000039	L676	FWP-10	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000040	L677	FWP-11	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
212290	0520-00509-V0	EQT00000000011	L678	4102JA	471993.660	3331991.334	2.877E-05	15.240	810.928	30.949	0.305	
212290	0520-00509-V0	EQT00000000012	L679	4102JB	472011.875	3331994.279	2.877E-05	15.240	810.928	30.949	0.305	
212290	0520-00509-V0	EQT00000000029	L680	B702JB	471987.553	3332127.647	3.226E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000028	L681	B702JA	471986.571	3332158.123	3.226E-01	64.999	688.706	18.136	3.706	-
1250	3009-V6	EQT00000000501	L682	GA1016A/B	467201.065	3339256.602	2.402E-03	1.000	0.000	0.001	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
212290	0520-00509-V0	EQT00000000013	L683	4102JC	472031.612	3331989.686	2.877E-05	15.240	810.928	30.949	0.305	
1250	2935-V11	EQT00000000294	L684	3(VIII-A)3	468398.000	3338250.999	2.394E-02	9.144	588.706	10.775	0.610	-
165504	0520-00420-01	EQT00000000004	L685	2009-04	472063.277	3331902.507	2.772E-02	3.048	477.594	3.533	0.204	-
165504	0520-00420-01	EQT00000000006	L686	2009-06	472063.277	3331902.507	1.260E-04	3.048	783.150	14.326	0.101	-
165504	0520-00420-01	EQT00000000007	L687	2009-07	472063.277	3331902.507	1.260E-03	3.048	477.594	3.533	0.204	-
165504	0520-00420-01	EQT00000000009	L688	2018-10	472063.277	3331902.507	2.772E-02	9.144	1273.150	0.001	0.076	-
212290	0520-00509-V0	EQT00000000023	L689	B701JB	471987.581	3332214.413	3.200E-01	64.999	466.483	28.834	3.048	-
212290	0520-00509-V0	EQT00000000022	L690	B701JA	471989.482	3332241.889	3.200E-01	64.999	466.483	28.834	3.048	-
1250	2930-V7	EQT00000000240	L691	3(XXVI)2	468189.967	3338562.993	2.444E-01	48.768	422.039	7.437	2.286	-
1250	3010-V6	EQT00000000357	L692	3(MISC)GEN	468399.959	3338400.045	1.424E-01	3.048	298.150	0.091	0.091	-
1250	3010-V6	EQT00000000357	L693	3(MISC)GEN	468399.959	3338400.045	1.424E-01	3.658	800.928		0.101	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L692. Therefore, this source was excluded from this modeling analysis.
1250	3010-V6	EQT00000000412	L694	3(MISC)GEN EMERG	468399.959	3338400.045	4.410E-02	3.658	800.928	0.001	0.101	-
1250	3010-V6	EQT00000000549	L695	432-JG827	468399.959	3338400.045	7.048E-04	3.658	800.928	0.001	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1250	2930-V7	EQT00000000239	L696	3(XXVI)1	468189.990	3338637.016	2.444E-01	45.720	422.039	7.437	2.286	-
212290	0520-00509-V0	EQT00000000027	L697	A702JB	472154.003	3332122.571	3.226E-01	64.999	688.706	18.136	3.706	-
1250	2930-V7	EQT00000000540	L698	RNTL-BLR-1	468519.970	3338349.945	7.182E-02	10.973	516.483	12.192	1.219	-
1250	2930-V7	EQT00000000541	L699	RNTL-BLR-2	468519.970	3338349.945	7.182E-02	10.973	516.483	12.192	1.219	-
212290	0520-00509-V0	EQT00000000026	L700	A702JA	472154.078	3332152.157	3.226E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000009	L701	7106B	472079.454	3332469.046	5.708E-01	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000021	L702	A701JB	472154.999	3332211.550	3.200E-01	64.999	466.483	28.834	3.048	-
1250	2920-V4	EQT00000000237	L703	3(XXII)1	468507.957	3338390.980	2.331E-01	60.960	433.150	13.274	2.134	-
1250	3010-V6	EQT00000000338	L704	3(MISC)CT11	468328.886	3338560.042	2.728E-03	10.058	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
212290	0520-00509-V0	EQT00000000020	L705	A701JA	472155.068	3332238.699	3.200E-01	64.999	466.483	28.834	3.048	-
1250	3010-V6	EQT00000000342	L706	3(MISC)3XCT	468362.101	3338559.946	7.409E-01	6.096	298.150		6.096	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L707. Therefore, this source was excluded from this modeling analysis.

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	3010-V6	EQT00000000342	L707	3(MISC)3XCT	468362.101	3338559.946	1.674E-03	10.058	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	2920-V4	EQT00000000238	L708	3(XXII)2	468499.987	3338432.004	8.215E-01	76.200	416.483	12.713	4.014	-
1250	2920-V4	RLP00000000017	L709	3(XXII)3	468485.020	3338449.999	1.096E-01	41.148	699.817	15.993	0.204	-
1250	2935-V11	EQT00000000525	L710	B101	468615.811	3338365.295	7.560E-03	15.240	1255.372	0.001	1.219	-
1250	2796-V14	EQT00000000534	L711	B-103	469126.956	3337852.998	3.667E-01	15.240	1088.706	0.001	2.743	-
1250	2796-V14	EQT00000000517	L712	3(IX)39	469141.021	3337855.951	6.930E-02	3.810	298.150	0.229	0.457	-
1250	2796-V14	EQT00000000063	L713	3(IX)34	469141.000	3337856.000	7.308E-02	22.860	1273.150	20.001	1.606	-
1250	2920-V4	EQT00000000230	L714	3(XVIII-A)3	468520.018	3338500.983	7.938E-02	29.962	695.372	6.971	1.728	-
1250	3010-V6	EQT00000000351	L715	3(XXIII)2	468163.099	3338825.919	9.403E+01	67.056	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
1250	2920-V4	EQT00000000232	L716	3(XVIII-A)2	468520.041	3338508.961	8.064E-02	29.962	672.039	6.907	1.728	-
1250	3010-V6	EQT00000000334	L717	3(MISC)CT1&2	468151.888	3338844.125	3.722E-03	10.058	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	2920-V4	EQT00000000234	L718	3(XVIII)2	468512.983	3338532.031	7.812E-02	27.889	658.706	9.104	1.295	-
104574	0520-00304-02	EQT00000000001	L719	2-02-GR-BS	451839.733	3339606.280	2.520E-04	3.048	533.150	2.286	0.152	-
104574	0520-00304-02	EQT00000000003	L720	4-02-F	451839.733	3339606.280	1.260E-03	4.572	1088.706	1.829	0.610	-
104574	0520-00304-02	EQT00000000019	L721	24-14-ICE-ES	451839.733	3339606.280	2.520E-03	3.048	810.928	16.429	0.152	-
1250	2920-V4	EQT00000000227	L722	3(X-A)1	468443.027	3338612.017	3.276E-02	19.202	816.483	7.687	1.067	-
1250	2920-V4	EQT00000000236	L723	3(XXVII-A)1	468489.983	3338568.997	1.890E-02	30.480	588.706	9.050	0.686	-
1250	2920-V4	EQT00000000228	L724	3(X-A)2	468442.957	3338620.993	4.788E-02	19.202	744.261	10.510	1.067	-
1250	2920-V4	EQT00000000231	L725	3(XVIII-A)4	468620.031	3338494.048	3.881E-01	52.852	616.483	6.203	4.191	-
1250	2920-V4	EQT00000000229	L726	3(XVIII-A)1	468619.997	3338515.989	8.568E-02	30.876	692.594	7.501	1.728	-
1250	2920-V4	EQT00000000225	L727	3(X)4	468517.047	3338639.951	1.071E-01	32.309	624.817	8.099	1.676	-
1250	2796-V14	EQT00000000518	L728	3(IX)51-T101	469142.287	3338032.029	1.260E-03	1.000	0.000	0.001	1.000	-
1250	2920-V4	EQT00000000233	L729	3(XVIII)1	468624.042	3338549.997	7.308E-02	27.889	741.483	7.239	1.448	-
145324	N/A	EQT00000000035	L730	CE-03	470321.903	3321226.118	8.918E-03	1.000	0.000	0.001	1.000	-
1250	2920-V4	EQT00000000235	L731	3(XVIII)3	468623.980	3338561.965	8.316E-02	28.164	644.261	11.019	1.015	-
1250	3010-V6	EQT00000000336	L732	3(MISC)CT4	468360.906	3338813.046	2.244E-03	10.058	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
212290	0520-00509-V0	EQT00000000005	L733	7105B	472322.141	3332482.062	1.109E-01	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000007	L734	7102B	472322.145	3332483.614	3.780E-04	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000008	L735	7103B	472322.148	3332484.833	3.780E-04	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000006	L736	7101B	472323.490	3332482.059	3.780E-04	106.070	1273.150	20.117	0.113	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
212290	0520-00509-V0	EQT00000000004	L737	7104B	472324.834	3332480.504	3.780E-04	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000016	L738	6101LC	472380.013	3332281.459	9.637E-04	15.240	655.372	23.716	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1244	0520-00007-V9	EQT00000000054	L739	B-100	467950.838	3339196.763	1.764E-01	15.240	422.039	28.392	1.372	-
1244	0520-00007-V9	EQT00000000055	L740	PE-07	467950.838	3339196.763	1.050E-03	7.315	739.261	19.873	0.241	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1244	0520-00007-V9	EQT00000000056	L741	PE-08	467950.838	3339196.763	1.453E-03	7.315	739.261	19.873	0.241	
1244	0520-00007-V9	EQT00000000057	L742	PE-09	467950.838	3339196.763	1.007E-03	7.315	739.261	19.873	0.241	
1244	0520-00007-V9	EQT00000000058	L743	PE-10	467950.838	3339196.763	8.820E-03	1.713	858.150	39.377	0.101	-
1244	0520-00007-V9	EQT00000000059	L744	PE-11	467950.838	3339196.763	6.041E-04	1.881	777.039	75.194	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1244	0520-00007-V9	EQT00000000064	L745	RTO	467950.838	3339196.763	9.702E-02	19.507	463.706	498.653	3.658	-
1244	0520-00007-V9	EQT00000000065	L746	96-01f	467950.838	3339196.763	2.520E-04	1.000	0.000	0.001	1.000	-
1244	Regper-Eng	EQT00000000066	L747	Eng	467950.838	3339196.763	1.726E-03	1.000	0.000	0.001	1.000	-
1244	0520-00007-V9	EQT00000000067	L748	PE-12	467950.838	3339196.763	1.812E-03	4.572	760.372	33.165	0.241	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
212290	0520-00509-V0	EQT00000000014	L749	6101LA	472381.394	3332294.420	9.637E-04	15.240	655.372	23.716	0.914	
1250	2920-V4	EQT00000000226	L750	3(X)5	468617.012	3338616.948	7.560E-02	25.908	544.261	5.172	1.728	-
1250	2930-V7	EQT00000000396	L751	3(XXXIII)1A	469041.019	3338209.947	1.764E-01	53.340	505.372	2.195	2.109	-
212290	0520-00509-V0	EQT00000000015	L752	6101LB	472411.353	3332294.345	9.637E-04	15.240	655.372	23.716	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1250	2920-V4	EQT00000000224	L753	3(X)6	468632.992	3338650.035	2.167E-01	28.346	477.594	13.378	1.881	-
212290	0520-00509-V0	EQT00000000018	L754	6301C	472392.371	3332407.642	1.121E-01	45.720	560.928	6.096	2.134	-
1250	2920-V4	EQT00000000223	L755	3(X)1	468622.029	3338687.965	3.654E-02	24.384	644.261	9.284	0.914	-
1250	3010-V6	EQT00000000335	L756	3(MISC)CT3	468913.055	3338410.990	2.139E-03	15.240	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	3010-V6	EQT00000000350	L757	3(XXII)4	468405.069	3338904.007	9.402E+01	65.532	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
212290	0520-00509-V0	EQT00000000002	L758	B201B	472433.730	3332382.606	6.174E-02	30.480	1088.706	13.411	1.737	-
212290	0520-00509-V0	EQT00000000001	L759	A201B	472438.366	3332387.248	6.174E-02	30.480	1088.706	13.411	1.737	-
212290	0520-00509-V0	EQT00000000003	L760	C201B	472448.188	3332385.672	6.174E-02	30.480	1088.706	13.411	1.737	-
1250	3009-V6	EQT00000000502	L761	GA112A/B	467481.496	3339676.857	2.772E-02	1.000	0.000	0.001	1.000	-
212290	0520-00509-V0	SCN00000000001	L762	7106B	472751.818	3331023.597	1.050E+01	106.070	1273.150	20.117	16.871	-
3351	0520-00098-V9	EQT00000000089	L763	GEN-1	472751.818	3331023.597	1.870E-04	1.576	866.483	53.203	0.064	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	3010-V6	EQT00000000521	L764	343B105	468675.890	3338804.164	2.034E+00	67.056	1273.150	20.117	3.505	EQT521 is a part of GRP0138. Based on the SR 172 in 3010-V6 permit, only one flare must operate at any given time. It will be a violation of this permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, the annual emissions (70.72 tpy) were modeled.
1250	3010-V6	EQT00000000522	L765	343B107	468683.977	3338804.141	9.408E+01	91.440	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
1250	3010-V6	EQT00000000343	L766	3(IV)1	469139.021	3338377.109	9.402E+01	64.313	1273.150	20.117	3.505	
1244	0520-00007-V9	EQT00000000015	L767	96-05b	467891.470	3339503.224	1.483E-03	13.716	295.372	6.553	12.253	Based on EDMS Document ID: 12013806 Pg: 161/295, the PM hourly emission is 2.29 lb/hr. Based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.514% (1000 ppm) was applied to the hourly emissions.
1250	2796-V14	EQT00000000064	L768	3(IX)35	469216.000	3338344.000	1.562E-01	30.480	1273.150	20.001	2.737	-
1244	0520-00007-V9	EQT00000000014	L769	96-05a	467879.440	3339603.324	1.302E-03	13.716	295.372	12.466	9.662	Based on EDMS Document ID: 12013806 Pg: 161/295, the PM hourly emission is 2.01 lb/hr. Based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.514% (1000 ppm) was applied to the hourly emissions.
1250	2930-V7	EQT00000000397	L770	3(XXXIII)1B	469416.991	3338210.001	1.764E-01	53.340	505.372	2.347	2.109	-
3766	0520-00057-V5AA	EQT00000000007	L771	LR-01VCU	468471.530	3339149.821	1.021E-01	13.716	1271.483	18.440	2.438	-
1250	2930-V7	EQT00000000398	L772	3(XXXIII)2A	469453.005	3338212.006	2.646E-01	48.768	422.039	7.437	2.286	-
1250	2930-V7	EQT00000000399	L773	3(IIIXXX)2B	469453.968	3338212.003	2.646E-01	53.340	505.372	5.730	2.539	-
1250	2930-V7	EQT00000000256	L774	3(VII-C)2	469085.034	3338591.019	2.381E-01	36.576	727.594	3.353	2.134	-
1250	2930-V7	EQT00000000252	L775	3(III)1	469114.990	3338562.012	1.499E-01	47.244	672.039	2.926	2.134	-
1250	2930-V7	EQT00000000255	L776	3(VII-C)1	469114.990	3338562.012	2.003E-01	30.480	810.928	2.896	2.438	-
1250	2930-V7	EQT00000000260	L777	3(III)4	469114.990	3338562.012	1.046E-01	19.812	298.150	0.098	0.457	Based on EDMS Document ID: 12290501 (Pg 133/172), maximum hourly emission is based on all the emissions for a cycle occur in 1 hour (which is overly conservative). Therefore, the average hourly emissions were modeled for this source.
1250	2930-V7	EQT00000000253	L778	3(III)2	469114.993	3338563.010	1.499E-01	46.482	627.594	2.926	2.134	-
1250	2908-V10	EQT00000000034	L779	3(XVI)4	468595.894	3339076.106	3.402E-02	27.432	637.594	3.767	1.448	-
1250	2908-V10	EQT00000000033	L780	3(XVI)3	468594.852	3339081.982	2.394E-02	33.757	555.928	3.770	1.219	-
1250	2930-V7	EQT00000000257	L781	3(XIII)1	469088.028	3338663.039	2.003E-01	60.960	435.928	6.767	1.676	-
1250	2930-V7	EQT00000000251	L782	3(I-D)3	469087.972	3338677.001	2.192E-01	60.960	644.261	6.523	1.676	-
1250	2930-V7	EQT00000000249	L783	3(I-D)1	469070.996	3338699.987	1.877E-01	30.480	810.928	5.944	1.676	-
1250	2930-V7	EQT00000000268	L784	3(K-6)5	469249.017	3338531.051	5.027E-01	28.194	477.594	4.724	2.896	-
1250	2930-V7	RLP00000000018	L785	3(XXVI)5	469225.980	3338556.049	5.292E-02	3.048	373.150	0.001	0.152	Based on EDMS Document ID: 12290501 (Pg 133/172), maximum hourly emission is based on all the emissions for a cycle occur in 1 hour (which is overly conservative). Therefore, the average hourly emissions were modeled for this source.
1250	2930-V7	EQT00000000266	L786	3(K-6)3	469209.972	3338581.027	9.853E-01	38.100	494.261	24.140	2.362	-
1250	2930-V7	EQT00000000516	L787	B1E	469209.972	3338581.027	5.166E-01	19.812	422.039	16.947	2.134	-
1250	2930-V7	EQT00000000250	L788	3(I-D)2	469088.042	3338702.045	8.190E-02	21.336	688.706	2.134	1.829	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

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1250	2930-V7	RLP00000000019	L789	3(XXVI)7	469226.033	3338574.998	1.890E+00	3.048	373.150	0.001	0.152	Based on the Permit No. 2930-V7 (pg 61/66), 1250RLP00000000018 and 1250RLP00000000019 shall not vent routine emissions at the same time. Therefore, excluded this source from the modeling analysis.
1250	2930-V7	EQT00000000267	L790	3(K-6)4	469249.007	3338561.968	5.443E-01	28.194	477.594	4.724	2.896	-
1250	2930-V7	EQT00000000265	L791	3(K-6)2	469235.955	3338576.965	1.449E+00	22.647	513.706	13.076	2.438	-
1250	2908-V10	EQT00000000028	L792	3(II)7	468721.059	3339080.070	1.726E-01	34.747	655.372	11.342	2.134	-
1250	2930-V7	EQT00000000264	L793	3(K-6)1	469261.975	3338585.978	1.244E+00	24.536	463.706	12.405	2.743	-
1244	0520-00007-V9	EQT00000000052	L794	B-900	468101.317	3339629.604	1.789E-01	15.240	422.039	28.651	1.372	-
1244	0520-00007-V9	EQT00000000009	L795	96-02d	468100.933	3339630.048	8.946E-02	15.240	409.817	0.238	0.762	-
1250	2908-V10	EQT00000000027	L796	3(II)4	468744.077	3339083.108	1.512E-02	16.764	520.372	5.002	0.838	-
1250	2908-V10	EQT00000000038	L797	3(II)16	468735.090	3339104.963	1.495E+01	70.104	342.039	12.424	2.438	EQT00000000038, EQT00000000039, and EQT00000000040 are part of GRP0110 CAP, the GRP0110 average hourly emissions and individual maximum hourly emissions (72+46.67=118.67 lb/hr) were modeled under this source.
1250	2930-V7	EQT00000000272	L798	3(K-6)9	469269.000	3338621.000	6.061E-01	30.480	422.039	14.508	2.362	-
1250	2908-V10	EQT00000000030	L799	3(II)8	468824.070	3339080.110	9.450E-02	34.747	688.150	6.203	2.134	-
1250	2930-V7	EQT00000000271	L800	3(K-6)8	469269.010	3338656.990	6.061E-01	30.480	422.039	14.057	1.917	-
1250	2796-V14	EQT00000000062	L801	3(IX)12	469373.000	3338553.000	6.930E-02	1.000	298.150	0.001	1.000	-
1250	2930-V7	EQT00000000247	L802	3(I)5	469134.986	3338791.006	7.195E-01	30.480	435.928	12.527	2.210	-
1250	2930-V7	EQT00000000248	L803	3(I)6	469118.998	3338822.965	7.636E-01	30.480	435.928	20.086	2.210	-
1250	2908-V10	EQT00000000039	L804	3(II)17	468823.082	3339105.045	5.880E+00	70.104	342.039	12.424	2.438	EQT00000000038, EQT00000000039, and EQT00000000040 are part of GRP0110 CAP, the emissions from these sources were merged and modeled under 1250EQT00000038 (merged stack; refer to Model ID: L797).
1250	2908-V10	EQT00000000029	L805	3(II)5	468836.165	3339101.573	2.142E-02	16.764	555.372	7.373	0.838	-
1244	0520-00007-V9	EQT00000000011	L806	96-03a	468036.481	3339811.305	2.999E-01	46.634	1273.000	20.000	3.167	LDEQ flare default stack temperature and stack velocity were utilized. The stack diameter is calculated based on the permitted heat input.
1250	2908-V10	EQT00000000032	L807	3(II)9	468914.951	3339080.184	1.726E-01	34.747	649.261	11.232	2.134	-
1250	2908-V10	EQT00000000031	L808	3(II)6	468921.984	3339081.937	1.512E-02	16.764	479.817	4.615	0.838	-
1250	2908-V10	EQT00000000040	L809	3(II)18	468912.134	3339105.125	5.880E+00	70.104	342.039	12.424	2.438	EQT00000000038, EQT00000000039, and EQT00000000040 are part of GRP0110 CAP, the emissions from these sources were merged and modeled under 1250EQT00000038 (merged stack; refer to Model ID: L797).
1244	0520-00007-V9	EQT00000000012	L810	96-03b	468016.332	3339867.324	2.999E-01	24.384	1273.000	20.000	3.167	LDEQ flare default stack temperature and stack velocity were utilized. The stack diameter is calculated based on the permitted heat input.
1250	2930-V7	EQT00000000508	L811	B1D	469283.002	3338805.994	5.166E-01	19.812	422.039	16.947	2.134	-
15430	0560-00160-01	EQT00000000001	L812	1-99	462882.744	3315400.259	4.914E-01	1.000	773.150	0.001	1.000	-
15430	0560-00160-01	EQT00000000002	L813	2-99	462882.744	3315400.259	2.142E-02	1.829	844.261	48.768	0.076	-
5337	0520-00107-V6	EQT00000000018	L814	018	468430.199	3339641.174	1.260E-04	4.877	1273.150	19.995	0.457	-
5337	0520-00107-V6	EQT00000000010	L815	002	468205.363	3339855.471	2.331E-01	30.480	395.372	15.423	1.676	-
1250	2908-V10	EQT00000000322	L816	3(XXXIV)7-103	468957.905	3339221.903	1.890E-02	54.864	588.706	6.407	1.332	-
5337	0520-00107-V6	EQT00000000009	L817	009	468444.914	3339669.722	1.260E-02	4.572	1273.150	19.995	0.457	-
1250	2908-V10	EQT00000000321	L818	3(XXXIV)7-102	468957.939	3339233.982	3.150E-02	54.864	588.706	8.516	1.408	-
1250	2908-V10	EQT00000000320	L819	3(XXXIV)7-101	468957.979	3339248.055	3.150E-02	54.864	588.706	14.042	1.152	-
1250	2930-V7	EQT00000000254	L820	3(VII)1	469685.027	3338555.990	6.300E-02	35.204	577.594	2.438	1.707	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

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1250	3010-V6	EQT00000000353	L821	3(XXXIV)10	468966.929	3339281.052	9.403E+01	60.960	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
5337	0520-00107-V6	EQT00000000007	L822	006	467992.467	3340134.010	4.536E-02	16.764	313.150	9.321	9.449	-
5337	0520-00107-V6	EQT00000000027	L823	FWP-1	468471.467	3339764.169	2.301E-04	6.096	672.039	45.720	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
5337	0520-00107-V6	EQT00000000028	L824	FWP-2	468471.948	3339764.168	2.301E-04	6.096	672.039	45.720	0.152	
5337	0520-00107-V6	EQT00000000029	L825	FWP-3	468472.237	3339764.167	2.301E-04	6.096	672.039	45.720	0.152	
5337	0520-00107-V6	EQT00000000030	L826	FWP-4	468472.525	3339764.166	2.301E-04	6.096	672.039	45.720	0.152	
5337	0520-00107-V6	EQT00000000031	L827	FWP-5	468472.718	3339764.165	2.301E-04	6.096	672.039	45.720	0.152	
5337	0520-00107-V6	EQT00000000032	L828	FWP-6	468473.007	3339764.165	2.301E-04	6.096	672.039	45.720	0.152	
42895	0520-00170-V5	EQT00000000003	L829	3	468801.730	3339484.641	1.764E-01	42.672	1273.000	20.000	0.762	LDEQ flare default stack temperature and stack velocity were utilized.
1250	2908-V10	EQT00000000325	L830	3(XXXIV)7-203	468958.078	3339385.130	1.890E-02	54.864	588.706	6.407	1.332	-
42895	0520-00170-V5	EQT00000000001	L831	1	468820.100	3339512.292	1.089E+00	42.672	402.594	16.459	2.743	-
1250	2908-V10	EQT00000000324	L832	3(XXXIV)7-202	468957.823	3339397.099	3.150E-02	54.864	588.706	8.516	1.408	-
42895	0520-00170-V5	EQT00000000002	L833	2	468812.455	3339532.260	6.841E-04	5.791	0.000	0.001	1.000	Based on Document ID: 10481441 (Pg: 72/129), the $PM_{2.5}$ emissions are assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.196% (11,500 ppm) was applied to the permitted hourly emissions.
1250	2908-V10	EQT00000000323	L834	3(XXXIV)7-201	468957.859	3339410.064	3.150E-02	54.864	588.706	14.042	1.152	-
1250	2908-V10	EQT00000000036	L835	3(XXIX)2	468918.008	3339479.435	1.071E-01	37.795	577.594	4.459	1.829	-
1250	2908-V10	EQT00000000035	L836	3(XXIX)1	468932.930	3339479.614	1.613E-01	37.795	577.594	6.514	2.286	-
160280	0520-00412-03	ARE00000000004	L837	3-08 (A)	473559.496	3330760.112	2.570E-01	3.048	0.000	0.001	1.000	-
160280	0520-00412-03	ARE00000000005	L838	5-08	473559.496	3330760.112	5.506E-01	3.048	0.000	0.001	1.000	-
160280	0520-00412-03	ARE00000000006	L839	6-08	473559.496	3330760.112	3.780E-04	3.048	0.000	0.001	1.000	-
160280	0520-00412-03	ARE00000000007	L840	3-08 (B)	473559.496	3330760.112	1.260E-03	1.000	0.000	0.001	1.000	-
160280	0520-00412-03	EQT00000000002	L841	7-08	473559.496	3330760.112	1.134E-02	3.048	0.000	0.001	1.000	-
5337	0520-00107-V6	EQT00000000044	L842	EGEN1	468201.999	3340122.984	1.726E-04	2.134	699.261	0.003	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
5337	0520-00107-V6	EQT00000000011	L843	003	468206.261	3340165.081	1.247E-01	30.480	395.372	15.423	1.676	-
5337	0520-00107-V6	EQT00000000016	L844	016	468231.961	3340164.674	8.694E-02	33.528	410.928	17.843	1.423	-
5337	0520-00107-V6	EQT00000000041	L845	004A	468206.722	3340224.475	1.134E-02	12.192	449.817	47.183	0.387	-
5337	0520-00107-V6	EQT00000000042	L846	004B	468206.438	3340226.360	1.134E-02	12.192	449.817	47.183	0.387	-
1250	3010-V6	EQT00000000337	L847	3(MISC)CT502	468322.006	3340145.021	1.079E-03	10.058	298.150	12.009	9.144	Based on the current permit basis (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions are conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
5337	0520-00107-V6	EQT00000000005	L848	005	468152.612	3340287.131	7.560E-03	20.351	435.928	2.926	0.954	-
5337	0520-00107-V6	EQT00000000001	L849	001	468205.468	3340256.836	9.652E-01	86.868	373.150	14.076	3.962	-
5337	0520-00107-V6	EQT00000000035	L850	001SU	468205.468	3340256.836	3.177E-02	64.999	373.150	14.076	3.962	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
5337	0520-00107-V6	EQT00000000045	L851	EGEN2	468615.012	3339936.958	2.877E-06	2.134	699.261	0.003	1.000	

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	3010-V6	EQT00000000339	L852	3(XXXIII)3	469217.823	3339423.183	4.186E-03	10.058	298.150	12.009	9.144	Based on the current permit basis (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions are conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	3010-V6	EQT00000000339	L853	3(XXXIII)3	469217.823	3339423.183	1.852E+00	6.096	298.150		6.096	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L852. Therefore, this source was excluded from this modeling analysis.
5337	0520-00107-V6	EQT00000000015	L854	015	468204.977	3340286.979	1.058E-01	63.703	408.150	11.918	1.372	-
1250	3010-V6	EQT00000000333	L855	3(MISC)CT5&6	469359.819	3339423.007	1.712E-02	10.058	298.150	12.009	9.144	Based on the current permit basis (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions are conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	3010-V6	EQT00000000354	L856	2(202)25	468163.903	3340496.092	9.402E+01	61.570	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
5337	0520-00107-V6	EQT00000000008	L857	008	468099.398	3340657.624	1.008E-02	81.077	1273.150	19.995	1.097	-
5337	0520-00107-V6	EQT00000000046	L858	008SU	468080.211	3340679.842	1.008E-02	81.077	1273.150	19.995	1.097	-
1253	0520-00006-V13	EQT00000000360	L859	1-15	468899.936	3340100.039	1.260E-04	29.413	366.483	0.012	0.701	-
1253	0520-00006-V13	EQT00000000361	L860	2-15	468899.936	3340100.039	1.260E-04	29.413	366.483	0.012	0.701	-
9061	0520-00127-V6	EQT00000000007	L861	86	468377.900	3340523.400	7.686E-02	1.000	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000127	L862	MP4-1	468904.760	3340103.682	5.040E-03	38.405	338.706	18.288	0.405	-
1253	0520-00006-V13	EQT00000000128	L863	MP4-2	468904.760	3340103.682	5.040E-03	7.620	310.928	23.473	0.253	-
1253	0520-00006-V13	EQT00000000129	L864	MP4-3	468904.760	3340103.682	2.520E-04	3.658	347.039	16.154	0.101	-
1253	0520-00006-V13	EQT00000000133	L865	MP5-1	468904.760	3340103.682	5.040E-03	38.405	338.706	18.288	0.405	-
1250	2796-V14	EQT00000000007	L866	3(XXX)1	469953.000	3339145.000	8.820E-02	15.240	1088.706	0.001	2.438	-
1253	0520-00006-V13	EQT00000000134	L867	MP5-3	468804.835	3340203.698	7.560E-03	5.486	322.039	18.288	0.405	-
1253	0520-00006-V13	EQT00000000137	L868	MP5-6	468804.835	3340203.698	7.560E-03	5.486	322.039	18.288	0.405	-
1253	0520-00006-V13	EQT00000000146	L869	218	468804.835	3340203.698	6.300E-03	24.384	299.817	9.272	1.000	-
1253	0520-00006-V13	EQT00000000147	L870	219	468804.835	3340203.698	6.300E-03	24.384	299.817	7.620	1.000	-
1253	0520-00006-V13	EQT00000000348	L871	223	468804.835	3340203.698	1.260E-03	24.384	297.039	2.316	1.000	-
1253	0520-00006-V13	EQT00000000349	L872	224	468804.835	3340203.698	1.260E-03	24.384	297.039	2.316	1.000	-
1253	0520-00006-V13	EQT00000000350	L873	225	468804.835	3340203.698	1.260E-03	24.384	297.039	2.316	1.000	-
1253	0520-00006-V13	EQT00000000351	L874	226	468804.835	3340203.698	1.260E-03	24.384	297.039	2.316	1.000	-
1253	0520-00006-V13	EQT00000000123	L875	3-99	468873.664	3340170.591	1.260E-04	9.144	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000124	L876	4-99	468873.664	3340170.591	1.260E-04	9.144	0.000	0.001	1.000	-
1253	0520-00006-V13	RLP00000000113	L877	1-18	469085.971	3340050.977	5.040E-03	9.144	622.039	11.500	0.457	-
9061	0520-00127-V6	EQT00000000016	L878	1-94A	468577.000	3340474.500	1.084E-01	15.240	427.594	18.014	0.838	-
9061	0520-00127-V6	EQT00000000017	L879	1-94B	468577.000	3340478.900	1.625E-01	15.240	427.594	18.014	0.838	-
1253	0520-00006-V13	EQT00000000118	L880	1-99	469124.608	3340029.481	5.040E-04	13.106	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000121	L881	2-99	469124.608	3340029.481	5.040E-04	13.106	0.000	0.001	1.000	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1253	0520-00006-V13	EQT00000000355	L882	ENG1	469304.750	3339903.646	8.630E-05	2.438	366.483	10.647	0.061	
1253	0520-00006-V13	EQT00000000356	L883	ENG2	469304.750	3339903.646	2.589E-04	2.438	366.483	20.187	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1253	0520-00006-V13	EQT00000000357	L884	ENG3	469304.750	3339903.646	1.453E-03	2.438	533.150	24.975	0.198	
9061	0520-00127-V6	EQT00000000011	L885	201	468488.310	3340579.600	5.759E-04	3.048	855.372	0.001	0.101	
9061	0520-00127-V6	EQT00000000012	L886	202	468526.800	3340572.700	5.759E-04	3.048	855.372	0.001	0.101	
9061	0520-00127-V6	EQT00000000010	L887	200	468595.160	3340521.900	1.122E-03	4.572	755.372	0.001	0.134	
9061	0520-00127-V6	EQT00000000102	L888	1-14	468579.600	3340539.599	1.134E-02	9.144	422.039	15.139	0.680	-
9061	0520-00127-V6	EQT00000000072	L889	KPELLET1	468523.000	3340597.000	1.525E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000061	L890	JPELLET4	468518.600	3340601.800	1.386E-01	3.353	322.039	16.977	0.204	-
1253	0520-00006-V13	EQT00000000120	L891	2-05B	468800.526	3340381.011	1.260E-03	3.048	310.928	16.901	0.253	-
9061	0520-00127-V6	EQT00000000080	L892	KPELLET9	468509.800	3340634.500	1.525E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000100	L893	P1LOAD7	468550.000	3340604.000	1.260E-03	1.000	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000126	L894	1-05B	468804.826	3340403.716	2.520E-03	4.572	322.039	14.420	0.354	-
1253	0520-00006-V13	EQT00000000345	L895	3-05	468804.826	3340403.716	1.134E-02	3.048	310.928	26.545	0.509	-
1253	0520-00006-V13	EQT00000000346	L896	4-05	468804.826	3340403.716	1.134E-02	3.048	310.928	26.545	0.509	-
9061	0520-00127-V6	EQT00000000065	L897	JPELLET8	468506.200	3340640.300	1.386E-01	6.096	322.039	0.001	0.558	-
9061	0520-00127-V6	EQT00000000058	L898	JPELLET1	468516.200	3340634.500	1.386E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000088	L899	P2LOAD1	468543.700	3340617.600	2.268E-02	43.891	322.039	13.838	0.610	-
9061	0520-00127-V6	EQT00000000089	L900	P2LOAD2	468543.700	3340617.600	2.268E-02	34.747	322.039	13.838	0.610	-
9061	0520-00127-V6	EQT00000000090	L901	P2LOAD3	468543.700	3340617.600	1.008E-02	35.357	322.039	17.191	0.405	-
9061	0520-00127-V6	EQT00000000091	L902	P2LOAD4	468543.700	3340617.600	6.300E-03	6.096	298.150	1.372	0.914	-
9061	0520-00127-V6	EQT00000000081	L903	KPELLET10	468522.700	3340634.500	1.525E-01	1.000	0.000	0.001	0.914	-
9061	0520-00127-V6	EQT00000000066	L904	JPELLET9	468506.200	3340647.200	1.386E-01	6.096	322.039	7.559	0.549	-
1253	0520-00006-V13	EQT00000000365	L905	WE-1	468699.985	3340500.089	8.820E-03	2.438	366.483	2.012	0.152	-
1253	0520-00006-V13	EQT00000000366	L906	WE-2	468699.985	3340500.089	1.260E-02	2.438	366.483	2.957	0.152	-
9061	0520-00127-V6	EQT00000000059	L907	JPELLET2	468528.500	3340634.500	1.386E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000060	L908	JPELLET3	468506.300	3340654.200	1.386E-01	6.096	322.039	7.559	0.558	-
9061	0520-00127-V6	EQT00000000075	L909	KPELLET4	468522.600	3340643.800	1.525E-01	5.486	322.039	14.326	0.405	-
9061	0520-00127-V6	EQT00000000082	L910	KPELLET11	468535.100	3340634.500	1.525E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000077	L911	KPELLET6	468522.600	3340647.299	1.525E-01	6.096	322.039	9.144	0.152	-
9061	0520-00127-V6	EQT00000000078	L912	KPELLET7	468522.600	3340647.299	1.525E-01	6.096	322.039	101.194	0.152	-
9061	0520-00127-V6	EQT00000000074	L913	KPELLET3	468506.230	3340661.300	1.525E-01	6.096	322.039	7.559	0.558	-
9061	0520-00127-V6	EQT00000000064	L914	JPELLET7	468529.600	3340643.800	1.386E-01	6.096	322.039	7.559	0.558	-
9061	0520-00127-V6	EQT00000000062	L915	JPELLET5	468522.600	3340654.300	1.386E-01	6.096	322.039	14.326	0.405	-
9061	0520-00127-V6	EQT00000000063	L916	JPELLET6	468522.600	3340654.300	1.386E-01	6.096	322.039	9.144	0.152	-
9061	0520-00127-V6	EQT00000000076	L917	KPELLET5	468506.200	3340668.199	1.525E-01	6.096	322.039	7.559	0.558	-
9061	0520-00127-V6	EQT00000000067	L918	JPELLET10	468522.600	3340657.800	1.386E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000073	L919	KPELLET2	468529.600	3340657.700	1.525E-01	6.096	322.039	7.559	0.558	-
9061	0520-00127-V6	EQT00000000079	L920	KPELLET8	468529.500	3340664.699	1.525E-01	6.096	322.039	7.559	0.558	-
1253	0520-00006-V13	EQT00000000139	L921	211	469104.788	3340203.735	1.260E-04	24.384	299.817	0.006	1.000	-
1253	0520-00006-V13	EQT00000000140	L922	212	469104.788	3340203.735	1.260E-04	24.384	299.817	0.152	1.000	-
1253	0520-00006-V13	EQT00000000141	L923	213	469104.788	3340203.735	1.260E-04	24.384	299.817	0.152	1.000	-
1253	0520-00006-V13	EQT00000000142	L924	214	469104.788	3340203.735	1.260E-04	24.384	299.817	0.152	1.000	-
9061	0520-00127-V6	EQT00000000006	L925	55	468373.910	3340795.300	5.796E-02	1.000	0.000	0.001	1.000	-
1253	0520-00006-V13	RLP00000000017	L926	1-03	468804.822	3340503.780	2.520E-03	4.572	299.817	22.860	0.305	-
1253	0520-00006-V13	RLP00000000018	L927	2-03	468804.822	3340503.780	2.520E-03	4.572	299.817	22.860	0.305	-
1253	0520-00006-V13	EQT00000000354	L928	A-7625 CT	469004.854	3340403.481	1.260E-04	4.572	310.928	0.381	9.754	-
24134	0520-00152-03	ARE00000000002	L929	2-16	466625.985	3342021.581	2.810E-01	1.000	0.000	0.001	1.000	-
24134	0520-00152-03	EQT00000000001	L930	3-16	466625.985	3342021.581	5.393E-01	7.315	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000052	L931	FPELLET5	468555.300	3340775.900	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000051	L932	FPELLET4	468528.100	3340797.200	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000048	L933	FPELLET1	468555.400	3340784.300	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000049	L934	FPELLET2	468555.400	3340790.200	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000050	L935	FPELLET3	468555.400	3340793.699	5.544E-02	6.096	322.039	1.381	0.914	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1253	0520-00006-V13	EQT00000000138	L936	Z1	469304.820	3340203.506	8.141E+00	45.720	1273.000	20.000	16.281	LDEQ flare default stack temperature and stack velocity were utilized. The stack diameter is calculated based on the permitted heat input obtained from EDMS Document ID: 12545498 (pg 134/256).
1253	0520-00006-V13	EQT00000000373	L937	ENG6	469010.042	3340467.959	1.079E-03	3.048	635.928	72.390	0.128	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1253	0520-00006-V13	EQT00000000374	L938	ENG7	469010.042	3340467.959	1.726E-04	3.048	864.817	113.904	0.101	
9061	0520-00127-V6	EQT00000000028	L939	APELLET3	468531.800	3340850.300	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000042	L940	BPELLET8	468534.900	3340850.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000041	L941	BPELLET7	468539.100	3340850.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000040	L942	BPELLET6	468541.700	3340850.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000039	L943	BPELLET5	468544.400	3340850.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000099	L944	P1LOAD6	468620.000	3340794.000	2.520E-03	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000038	L945	BPELLET4	468555.100	3340850.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000083	L946	P1LOAD1	468619.100	3340802.499	6.300E-03	6.096	310.928	6.462	0.914	-
9061	0520-00127-V6	EQT00000000084	L947	P1LOAD2	468619.100	3340802.499	6.300E-03	6.096	298.150	1.372	0.914	-
9061	0520-00127-V6	EQT00000000085	L948	P1LOAD3	468619.100	3340802.499	6.300E-03	6.096	310.928	6.462	0.914	-
9061	0520-00127-V6	EQT00000000086	L949	P1LOAD4	468619.100	3340802.499	3.780E-03	6.096	298.150	1.372	0.914	-
9061	0520-00127-V6	EQT00000000087	L950	P1LOAD5	468619.100	3340802.499	2.520E-03	6.096	298.150	1.372	0.914	-
9061	0520-00127-V6	EQT00000000037	L951	BPELLET3	468555.000	3340854.100	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000036	L952	BPELLET2	468555.000	3340856.900	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000030	L953	APELLET5	468522.500	3340881.799	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000029	L954	APELLET4	468525.200	3340883.800	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000035	L955	BPELLET1	468553.600	3340863.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000026	L956	APELLET1	468553.600	3340865.899	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000027	L957	APELLET2	468553.500	3340875.000	5.544E-02	6.096	322.039	1.381	0.914	-
1253	0520-00006-V13	EQT00000000371	L958	2-18	469023.971	3340525.986	1.033E-01	6.401	549.817	8.068	1.000	-
1253	0520-00006-V13	EQT00000000372	L959	1-19	469028.011	3340558.997	1.033E-01	6.401	549.817	8.068	1.000	-
196978	0520-00492-V1	EQT00000000001	L960	001	470244.890	3339464.410	8.933E-01	91.440	0.000	96.622	1.067	-
196978	0520-00492-V1	EQT00000000002	L961	002	470246.400	3339464.439	1.260E-03	91.440	0.000	51.206	0.457	-
1253	0520-00006-V13	EQT00000000325	L962	5-08	468999.804	3340625.786	7.056E-02	12.192	491.483	17.605	0.863	-
1253	0520-00006-V13	EQT00000000322	L963	2-08	469014.820	3340625.744	1.109E-01	12.192	491.483	21.531	1.097	-
1253	0520-00006-V13	EQT00000000321	L964	1-08	469017.804	3340625.735	1.109E-01	12.192	491.483	21.531	1.097	-
1253	0520-00006-V13	EQT00000000324	L965	4-08	469019.921	3340625.729	7.056E-02	12.192	491.483	17.605	0.863	-
1253	0520-00006-V13	SCN00000000001	L966	MSS-BET	469019.921	3340625.729	1.411E-01	6.401	549.817	8.068	1.676	The MSS scenario include emissions from two firetube boilers (100 hrs/yr each), two victory boilers (200 hrs/yr each), two engines (75 hrs/yr each), and a turbine (15 hrs/yr) which operates for a smaller duration (intermittently). Therefore, modeled average hourly emissions. Conservatively assumed Victory Boiler stack parameters based on EDMS Document ID: 12545498 (pgs: 199-203).
1253	0520-00006-V13	EQT00000000370	L967	1-16	469041.868	3340625.667	1.789E-01	12.192	449.817	27.914	1.817	-
1253	0520-00006-V13	EQT00000000014	L968	5-91	469154.769	3340553.653	1.260E-03	12.802	0.000	0.001	1.000	-
1253	0520-00006-V13	RLP00000000005	L969	2-91	469104.855	3340603.660	1.260E-03	35.052	322.039	0.853	0.914	-
1253	0520-00006-V13	RLP00000000009	L970	2-94	469104.855	3340603.660	1.260E-03	35.052	322.039	0.853	0.914	-
1253	0520-00006-V13	RLP00000000010	L971	3-94	469104.855	3340603.660	1.260E-03	35.052	322.039	0.853	0.914	-
1253	0520-00006-V13	RLP00000000011	L972	4-94	469104.855	3340603.660	1.260E-03	35.052	322.039	0.853	0.914	-
132137	0520-00363-01	EQT00000000001	L973	H-1	474469.910	3331157.880	6.048E-02	9.144	810.928	3.658	0.762	-
196978	0520-00492-V1	EQT00000000017	L974	008B	470326.820	3339523.490	2.877E-05	2.743	699.817	57.912	0.204	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
196978	0520-00492-V1	EQT00000000016	L975	008A	470326.940	3339527.800	2.877E-05	2.743	699.817	57.912	0.204	
196978	0520-00492-V1	EQT00000000018	L976	008C	470327.040	3339528.700	2.877E-05	2.743	699.817	57.912	0.204	

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
196978	0520-00492-V1	EQT00000000039	L977	019	470299.900	3339560.920	1.512E-01	14.630	313.150	15.240	15.850	-
209722	0520-00508-00	EQT00000000008	L978	6-18-F	445965.802	3335679.385	8.820E-02	4.572	1088.706	299.923	0.335	-
1253	0520-00006-V13	RLP00000000013	L979	6-94	469204.868	3340603.600	1.260E-03	6.096	299.817	0.509	1.000	-
1253	0520-00006-V13	RLP00000000014	L980	7-94	469204.868	3340603.600	1.260E-03	6.096	299.817	0.509	1.000	-
123214	7777-00682-01	EQT00000000001	L981	05-07	468930.905	3340837.413	1.260E-03	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	EQT00000000002	L982	05-8a	468930.905	3340837.413	1.260E-03	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	EQT00000000003	L983	05-8b	468930.905	3340837.413	2.520E-03	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	FUG00000000001	L984	05-01	468930.905	3340837.413	4.158E-02	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	FUG00000000002	L985	05-02	468930.905	3340837.413	8.820E-03	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	FUG00000000003	L986	05-03	468930.905	3340837.413	4.158E-02	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	FUG00000000004	L987	05-04	468930.905	3340837.413	8.820E-03	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	FUG00000000005	L988	05-05	468930.905	3340837.413	4.158E-02	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	FUG00000000006	L989	05-06	468930.905	3340837.413	8.820E-03	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	FUG00000000010	L990	05-09	468930.905	3340837.413	5.040E-02	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	FUG00000000011	L991	05-10	468930.905	3340837.413	1.157E+00	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	FUG00000000012	L992	05-11	468930.905	3340837.413	3.906E-02	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	FUG00000000018	L993	13-09	468930.905	3340837.413	3.906E-02	1.000	0.000	0.001	1.000	-
123214	7777-00682-01	FUG00000000019	L994	13-10	468930.905	3340837.413	1.260E-03	1.000	0.000	0.001	1.000	-
1253	0520-00006-V13	RLP00000000004	L995	1-91	469104.848	3340703.613	2.520E-03	15.240	299.817	4.042	0.610	-
1253	0520-00006-V13	RLP00000000008	L996	1-94	469104.848	3340703.613	2.520E-03	15.240	322.039	4.042	0.610	-
1253	0520-00006-V13	EQT00000000016	L997	4-03	469250.691	3340639.264	1.260E-04	4.572	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000362	L998	3-15	469300.058	3340600.009	5.620E-01	13.411	324.817	13.920	0.509	-
1253	0520-00006-V13	EQT00000000012	L999	1-05	469304.881	3340603.652	8.820E-03	3.658	299.817	25.908	1.000	-
1253	0520-00006-V13	EQT00000000013	L1000	2-05	469304.881	3340603.652	8.820E-03	3.658	299.817	25.908	1.000	-
1253	0520-00006-V13	RLP00000000006	L1001	3-91	469304.881	3340603.652	1.260E-03	20.117	322.039	2.835	0.305	-
1253	0520-00006-V13	RLP00000000007	L1002	4-91	469304.881	3340603.652	1.260E-03	6.096	322.039	0.488	0.305	-
1253	0520-00006-V13	EQT00000000019	L1003	Z2	469604.846	3340403.685	8.703E+00	45.720	1273.000	20.000	16.834	LDEQ flare default stack temperature and stack velocity were utilized. The stack diameter is calculated based on the permitted heat input obtained from EDMS Document ID: 12545498 (pg 135/256).
1253	0520-00006-V13	EQT00000000015	L1004	3-03	469538.506	3340501.717	1.260E-04	4.572	0.000	0.001	1.000	-
196978	0520-00492-V1	EQT00000000040	L1005	020	470286.000	3339811.590	5.418E-02	13.411	315.372	15.240	15.850	-
196978	0520-00492-V1	EQT00000000043	L1006	005	470409.720	3339694.060	1.638E-02	60.960	372.039	11.430	3.658	-
17696	0520-00116-02	EQT00000000002	L1007	FWP-1	468771.419	3341145.705	1.008E-02	1.448	820.928	89.532	0.101	-
196978	0520-00492-V1	EQT00000000027	L1008	012	470548.130	3339596.229	1.814E-01	14.630	315.372	15.240	15.850	-
17696	0520-00116-02	EQT00000000003	L1009	FL-1	468851.511	3341114.671	3.389E-01	6.096	977.594	7.315	0.064	-
196978	0520-00492-V1	EQT00000000025	L1010	011A	470537.360	3339762.540	6.779E-01	60.960	353.150	20.147	2.134	-
196978	0520-00492-V1	EQT00000000026	L1011	011B	470602.580	3339763.489	6.779E-01	60.960	353.150	20.147	2.134	-
196978	0520-00492-V1	EQT00000000044	L1012	023	470578.420	3339791.309	1.945E-04	6.706	745.372	38.100	0.610	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
196978	0520-00492-V1	EQT00000000012	L1013	006D	470567.480	3339892.820	6.300E-03	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000011	L1014	006C	470567.170	3339912.630	6.300E-03	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000010	L1015	006B	470566.910	3339932.439	6.300E-03	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000009	L1016	006A	470566.620	3339952.250	6.300E-03	45.720	522.039	126.187	0.610	-
11496	0520-00142-V14	EQT00000000084	L1017	12-01	470025.000	3340481.000	5.040E-03	1.554	933.150	111.423	0.049	-
196978	0520-00492-V1	EQT00000000021	L1018	009C	470639.540	3339927.590	2.520E-03	60.960	308.150	18.898	0.204	-
196978	0520-00492-V1	EQT00000000020	L1019	009B	470639.490	3339939.170	2.520E-03	60.960	308.150	18.898	0.204	-
196978	0520-00492-V1	EQT00000000019	L1020	009A	470639.360	3339950.750	2.520E-03	60.960	308.150	18.898	0.204	-
11496	0520-00142-V14	EQT00000000102	L1021	18-06	470285.441	3340416.558	1.134E-03					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L1022. Therefore, this source was excluded from this modeling analysis.
11496	0520-00142-V14	EQT00000000102	L1022	18-06	470285.441	3340416.558	1.260E-03	2.374	933.150	134.828	0.070	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
11496	0520-00142-V14	EQT00000000103	L1023	17-03	470285.441	3340416.558	1.134E-02	1.701	933.150	82.269	0.070	-
11496	Regper-ENG	EQT00000000104	L1024	18-03	470285.441	3340416.558	1.260E-03	2.033	933.150	96.536	0.082	-
11496	Regper-ENG	EQT00000000104	L1025	18-03	470285.441	3340416.558	1.134E-03					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L1024. Therefore, this source was excluded from this modeling analysis.
11496	0520-00142-V14	EQT00000000105	L1026	18-02	470285.441	3340416.558	1.260E-03	2.033	933.150	96.536	0.082	-
11496	Regper-ENG	EQT00000000108	L1027	18-05	470285.441	3340416.558	1.134E-03					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L1028. Therefore, this source was excluded from this modeling analysis.
11496	Regper-ENG	EQT00000000108	L1028	18-05	470285.441	3340416.558	1.260E-03	2.374	933.150	134.828	0.070	-
11496	0520-00142-V14	SCN00000000002	L1029	88-90a	470285.441	3340416.558	1.964E+00	73.457	513.150	10.973	1.890	SCN00000000002 is an alternate operating scenario for EQT00000000013. Consistent with the modeling analysis performed for this facility and review of the modeling report submitted to LDEQ in October 2019, this source was excluded.
2792	0520-00058-01	ARE00000000001	L1030	1-97	470720.102	3340001.392	1.260E-03	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	ARE00000000002	L1031	22-97	470720.102	3340001.392	2.142E-02	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000002	L1032	2-97	470720.102	3340001.392	2.772E-02	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000003	L1033	3-97	470720.102	3340001.392	2.772E-02	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000004	L1034	4-97	470720.102	3340001.392	2.772E-02	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000005	L1035	5-97	470720.102	3340001.392	2.772E-02	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000006	L1036	6-97	470720.102	3340001.392	2.192E-01	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000007	L1037	7-97	470720.102	3340001.392	2.520E-02	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000008	L1038	8-97	470720.102	3340001.392	7.560E-01	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000010	L1039	10-97	470720.102	3340001.392	2.772E-02	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000011	L1040	11-97	470720.102	3340001.392	2.520E+00	19.812	294.261	19.416	0.305	-
2792	0520-00058-01	EQT00000000012	L1041	12-97	470720.102	3340001.392	2.520E-02	19.812	294.261	19.416	0.305	-
2792	0520-00058-01	EQT00000000013	L1042	13-97	470720.102	3340001.392	1.638E-02	19.812	294.261	3.231	0.305	-
2792	0520-00058-01	EQT00000000014	L1043	14-97	470720.102	3340001.392	1.159E-01	24.384	338.706	14.478	0.762	-
2792	0520-00058-01	EQT00000000015	L1044	15-97	470720.102	3340001.392	1.159E-01	24.384	338.706	14.478	0.762	-
2792	0520-00058-01	EQT00000000016	L1045	16-97	470720.102	3340001.392	1.159E-01	24.384	338.706	7.254	0.762	-
2792	0520-00058-01	EQT00000000017	L1046	17-97	470720.102	3340001.392	9.198E-02	27.432	294.261	40.234	0.405	-
2792	0520-00058-01	EQT00000000018	L1047	18-97	470720.102	3340001.392	1.638E-02	27.432	294.261	7.315	0.405	-
2792	0520-00058-01	EQT00000000019	L1048	19-97	470720.102	3340001.392	1.638E-02	27.432	294.261	7.315	0.405	-
2792	0520-00058-01	EQT00000000020	L1049	20-97	470720.102	3340001.392	1.323E-01	8.230	294.261	19.050	0.710	-
2792	0520-00058-01	EQT00000000021	L1050	21-97	470720.102	3340001.392	5.040E-02	24.384	294.261	10.973	0.405	-
2792	0520-00058-01	EQT00000000025	L1051	1-14	470720.102	3340001.392	8.316E-02	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000026	L1052	2-14	470720.102	3340001.392	5.544E-02	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000027	L1053	3-14	470720.102	3340001.392	5.544E-02	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000028	L1054	4-14	470720.102	3340001.392	3.780E-03	9.144	294.261	6.066	0.223	-
2792	0520-00058-01	EQT00000000029	L1055	5-14	470720.102	3340001.392	3.780E-03	5.791	294.261	7.193	0.204	-
2792	0520-00058-01	EQT00000000030	L1056	6-14	470720.102	3340001.392	1.260E-03	1.000	0.000	0.001	1.000	-
2792	0520-00058-01	EQT00000000033	L1057	1-17	470906.843	3339816.170	7.560E-03	3.658	755.372	34.107	0.101	-
11496	0520-00142-V14	EQT00000000083	L1058	95-170	470322.000	3340466.000	1.410E-03	2.987	804.261	56.775	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
11496	0520-00142-V14	EQT00000000064	L1059	90-351	470319.754	3340504.340	1.386E-01	24.323	438.150	28.816	0.838	-
11496	0520-00142-V14	EQT00000000046	L1060	88-350	470319.769	3340509.880	1.386E-01	24.323	438.150	28.816	0.838	-
11496	0520-00142-V14	EQT00000000068	L1061	95-10	470358.183	3340476.533	8.190E-02	26.579	300.928	1.320	0.152	-
11496	0520-00142-V14	EQT00000000069	L1062	95-15	470398.531	3340446.504	6.552E-02	15.240	353.150	11.250	0.509	-
11496	0520-00142-V14	FUG00000000001	L1063	95-300	470388.008	3340470.911	2.520E-02	1.000	0.000	0.001	1.000	-
11496	0520-00142-V14	EQT00000000035	L1123	88-301	470403.392	3340464.221	3.780E-03	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000030	L1124	88-271	470408.202	3340463.100	1.512E-02	34.717	378.706	12.030	0.405	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

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11496	0520-00142-V14	EQT00000000037	L1125	88-311	470403.407	3340469.762	3.780E-03	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000028	L1126	88-221	470374.604	3340497.543	1.310E-01	32.796	373.706	27.615	0.914	-
11496	0520-00142-V14	EQT00000000041	L1127	88-332	470412.052	3340463.090	3.780E-03	34.717	324.817	18.367	0.152	-
11496	0520-00142-V14	EQT00000000031	L1128	88-272	470408.217	3340468.641	1.512E-02	34.717	378.706	12.030	0.405	-
11496	0520-00142-V14	EQT00000000029	L1129	88-222	470378.454	3340497.532	1.310E-01	32.796	373.706	23.195	0.914	-
11496	0520-00142-V14	EQT00000000039	L1130	88-321	470403.425	3340476.410	3.780E-03	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000040	L1131	88-331	470412.067	3340468.630	3.780E-03	34.717	324.817	18.367	0.152	-
11496	0520-00142-V14	EQT00000000032	L1132	88-281	470408.235	3340475.289	1.512E-02	34.717	378.706	12.030	0.405	-
11496	0520-00142-V14	EQT00000000036	L1133	88-302	470403.440	3340481.951	3.780E-03	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000042	L1134	88-333	470412.085	3340475.279	3.780E-03	34.717	324.817	18.367	0.152	-
11496	0520-00142-V14	EQT00000000033	L1135	88-282	470408.250	3340480.830	1.512E-02	34.717	378.706	12.030	0.405	-
11496	0520-00142-V14	EQT00000000078	L1136	95-310	470413.054	3340477.493	3.780E-04	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000038	L1137	88-312	470403.455	3340487.492	3.780E-03	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000043	L1138	88-334	470412.100	3340480.819	3.780E-03	34.717	324.817	18.367	0.152	-
11496	0520-00142-V14	EQT00000000034	L1139	88-291	470408.268	3340487.479	1.512E-02	34.717	378.706	12.030	0.405	-
11496	0520-00142-V14	EQT00000000044	L1140	88-341	470413.080	3340487.466	3.780E-03	33.985	324.817	18.367	0.152	-
11496	0520-00142-V14	EQT00000000045	L1141	88-342	470411.170	3340493.011	3.780E-03	33.376	335.372	3.475	0.405	-
11496	0520-00142-V14	EQT00000000072	L1142	95-130	470297.960	3340631.834	1.260E-04	15.027	0.000	0.001	1.000	-
11496	0520-00142-V14	EQT00000000024	L1144	88-150	470408.468	3340561.723	2.533E-01	29.809	348.150	17.822	0.509	-
11496	0520-00142-V14	EQT00000000009	L1145	88-51	470380.712	3340620.529	1.260E-04	26.121	305.928	21.217	0.152	-
11496	0520-00142-V14	EQT00000000010	L1146	88-61	470385.534	3340623.840	1.260E-04	32.309	311.483	16.816	0.152	-
11496	0520-00142-V14	EQT00000000005	L1147	88-31	470391.309	3340623.824	1.260E-04	32.705	317.594	24.579	0.152	-
11496	0520-00142-V14	EQT00000000013	L1148	88-90	470353.979	3340666.034	1.964E+00	73.457	513.150	10.973	1.890	-
11496	0520-00142-V14	EQT00000000011	L1150	88-62	470409.598	3340623.775	1.260E-04	33.589	311.483	16.816	0.152	-
11496	0520-00142-V14	EQT00000000006	L1158	88-32	470442.326	3340623.687	1.260E-04	33.193	317.594	24.579	0.152	-
11496	0520-00142-V14	EQT00000000016	L1160	88-111	470403.942	3340668.115	1.260E-03	31.394	334.261	15.057	0.204	-
11496	0520-00142-V14	EQT00000000023	L1161	88-142	470423.149	3340651.442	3.150E-02	30.907	305.372	18.870	0.253	-
11496	0520-00142-V14	EQT00000000022	L1162	88-141	470423.170	3340659.199	3.150E-02	30.785	305.372	18.870	0.253	-
11496	0520-00142-V14	EQT00000000018	L1163	88-121	470403.500	3340682.522	6.300E-03	33.406	573.150	23.473	0.253	-
11496	0520-00142-V14	EQT00000000066	L1164	90-521	470477.914	3340613.618	2.520E-03	8.504	298.150	8.306	0.152	-
11496	0520-00142-V14	EQT00000000025	L1165	88-160	470475.802	3340615.840	1.260E-03	30.724	312.594	7.928	0.204	-
11496	0520-00142-V14	EQT00000000021	L1166	88-132	470421.667	3340672.943	1.260E-02	33.406	573.150	47.067	0.253	-
11496	0520-00142-V14	EQT00000000063	L1167	90-161	470484.562	3340615.816	1.260E-03	30.724	312.594	7.928	0.204	-
11496	0520-00142-V14	EQT00000000020	L1168	88-131	470403.525	3340691.720	1.260E-02	33.406	573.150	47.067	0.253	-
11496	0520-00142-V14	EQT00000000017	L1169	88-112	470422.252	3340675.823	1.260E-03	29.627	334.261	15.057	0.204	-
11496	0520-00142-V14	EQT00000000067	L1170	90-522	470489.465	3340613.587	2.520E-03	8.504	298.150	8.306	0.152	-
11496	0520-00142-V14	EQT00000000019	L1172	88-122	470421.693	3340682.806	6.300E-03	33.406	573.150	23.473	0.253	-
11496	0520-00142-V14	EQT00000000082	L1174	95-160	470467.830	3340666.469	1.410E-03	5.944	756.483	86.042	0.253	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
203831	3136-V2	EQT00000000006	L1238	ETH-FLARE2	470513.640	3342872.670	1.169E+01	13.716	1273.150	20.000	19.571	Updated the stack diameter based on heat input of the flare obtained from EDMS Document ID: 12232403 and the default flare stack velocity was utilized.
203831	3136-V2	EQT00000000005	L1239	ETH-FLARE1	470533.023	3342994.734	1.169E+01	39.624	1273.150	22.811	18.288	-
203831	3136-V2	EQT00000000001	L1249	ETH-BOILER	470754.370	3342958.902	3.944E-01	64.922	422.039	15.545	2.134	-
203831	3136-V2	EQT00000000002	L1250	ETH-CT	470525.767	3343159.201	1.260E-04	13.161	319.261	10.244	9.754	-
195519	0520-00488-V4	EQT00000000020	L1255	MEG-TOX	470817.959	3342985.993	5.670E-02	15.240	533.150	14.603	1.366	-
195519	0520-00488-V4	EQT00000000001	L1256	MEG-CT	470939.008	3342906.994	3.780E-04	15.850	315.928	11.015	9.997	-
203831	3136-V2	EQT00000000011	L1257	ETH-H-1101	470723.044	3343084.648	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000003	L1258	ETH-DECOKE1	470739.302	3343082.499	2.356E-01	73.152	572.039	24.771	0.914	-
203831	3136-V2	EQT00000000012	L1259	ETH-H-1102	470723.083	3343099.386	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000013	L1260	ETH-H-1103	470723.092	3343102.600	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000014	L1261	ETH-H-1104	470723.035	3343117.338	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000015	L1262	ETH-H-1105	470723.046	3343121.438	1.310E-01	73.152	397.594	10.973	2.350	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
203831	3136-V2	EQT00000000016	L1263	ETH-H-1106	470723.081	3343134.847	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000017	L1264	ETH-H-1107	470723.091	3343138.393	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000004	L1265	ETH-DECOKE2	470739.379	3343147.325	2.356E-01	73.152	572.039	24.771	0.914	-
203831	3136-V2	EQT00000000007	L1270	ETH-FWP1	471316.966	3343139.038	3.308E-04	9.144	738.706	159.822	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
203831	3136-V2	EQT00000000008	L1271	ETH-FWP2	471316.966	3343139.038	3.308E-04	9.144	738.706	159.822	0.152	
1255	2269-V7	EQT00000000544	L1281	563	472145.000	3343279.000	1.260E-04	4.801	344.261	20.025	0.052	-
1255	897-V9	EQT00000000088	L1282	533B	472050.501	3343374.615	3.780E-04	9.754	313.706	11.710	5.486	-
1255	2106-V7	EQT00000000066	L1283	011	471622.980	3343764.004	1.310E+00	24.994	420.928	19.227	4.840	-
1255	2106-V7	EQT00000000065	L1284	010	471622.964	3343795.032	1.310E+00	24.994	420.928	19.114	4.840	-
1255	897-V9	EQT00000000080	L1285	030	472129.321	3343376.630	1.147E-01	45.720	444.261	3.645	2.374	-
1255	2106-V7	EQT00000000064	L1286	009	471673.035	3343769.969	2.276E+00	24.384	449.817	14.691	5.334	-
1255	2106-V7	EQT00000000663	L1287	009A	471684.968	3343770.049	2.276E+00	24.384	449.817	19.998	4.572	-
1255	897-V9	EQT00000000077	L1288	016	472122.472	3343407.675	7.434E-02	46.634	505.372	9.921	1.219	-
1255	897-V9	EQT00000000078	L1289	017	472137.482	3343406.751	7.434E-02	46.634	505.372	9.921	1.219	-
1255	2106-V7	EQT00000000063	L1290	008	471673.016	3343837.011	2.276E+00	24.384	449.817	14.691	5.334	-
1255	2798-V5	EQT00000000592	L1291	533P	471593.964	3343929.967	1.260E-03	7.010	315.372	3.581	6.477	-
1255	2798-V5	EQT00000000001	L1292	105	471818.978	3343754.965	4.284E-02	20.726	294.261	15.429	1.372	-
1255	897-V9	EQT00000000082	L1293	308	472104.275	3343517.648	2.589E-01	19.294	449.817	2.155	0.914	Based on EDMS Document ID: 9708826 (Pg 123/182), this source only operates in certain situations such as reactor startups, shutdowns, catalyst charging, and scrubber maintenance operations which occurs rarely. The emissions from normal operation are accounted under EQTs 261, 392, and 393 of 2040 Permit. Therefore, this source was excluded.
1255	897-V9	EQT00000000083	L1294	531A	472104.275	3343517.648	1.764E-02	28.651	449.817	2.478	1.067	-
1255	897-V9	EQT00000000084	L1295	531B	472104.275	3343517.648	1.764E-02	28.651	449.817	2.478	1.067	-
1255	897-V9	EQT00000000085	L1296	532A	472106.503	3343523.516	5.322E-06	2.438	310.928	0.701	0.558	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	RLP00000000010	L1297	123	471815.966	3343781.014	5.835E-02	13.716	369.261	9.565	0.610	Based on OO8 GCXVII Activity, the SUSD, cut in and cut out operations are operated for 4.75 hours. Therefore, the emissions were normalized based on 4.75 hours of operation in a day. (Document ID: 11352541 (pg: 217/241).
1255	897-V9	EQT00000000086	L1298	532B	472126.520	3343523.797	5.322E-06	2.487	310.928	0.701	0.558	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	EQT00000000012	L1299	533M	471639.001	3343930.958	1.260E-03	19.711	315.372	12.241	8.534	-
1255	2798-V5	EQT00000000599	L1300	159	471866.017	3343747.974	1.260E-03	4.572	533.150	140.126	0.076	-
1255	2798-V5	RLP00000000009	L1301	122	471815.996	3343792.982	5.835E-02	13.716	369.261	9.565	0.610	Based on OO8 GCXVII Activity, the SUSD, cut in and cut out operations are operated for 4.75 hours. Therefore, the emissions were normalized based on 4.75 hours of operation in a day. (Document ID: 11352541 (pg: 217/241).
1255	897-V9	EQT00000000087	L1302	533A	472085.442	3343566.676	2.520E-04	9.754	313.706	11.710	5.486	
1255	2798-V5	RLP00000000008	L1303	121	471816.022	3343802.955	5.835E-02	13.716	369.261	9.565	0.610	Based on OO8 GCXVII Activity, the SUSD, cut in and cut out operations are operated for 4.75 hours. Therefore, the emissions were normalized based on 4.75 hours of operation in a day. (Document ID: 11352541 (pg: 217/241).
1255	Regper-ENG	EQT00000000686	L1304	162	471877.964	3343753.705	1.260E-03	2.438	668.150	63.045	0.101	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1255	2359-V6	EQT00000000552	L1305	34	472277.000	3343415.000	7.277E-02	4.572	477.594	30.267	0.229	Per current permit, this source operates intermittently. Therefore, the emissions were normalized.
1255	2359-V6	EQT00000000673	L1306	565	472277.000	3343415.000	7.192E-05	4.572	866.483	44.678	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	EQT00000000681	L1307	041	471841.966	3343788.039	4.315E-04	2.566	477.594	165.263	0.101	
1255	2798-V5	EQT00000000682	L1308	042	471841.966	3343788.039	2.733E-04	2.566	477.594	102.879	0.101	
1255	897-V9	EQT00000000079	L1309	021	472139.364	3343541.606	1.134E-02	12.192	1144.261	3.679	0.838	-
1255	2798-V5	RLP00000000007	L1310	120	471815.960	3343816.031	5.835E-02	13.716	369.261	9.565	0.610	Based on OO8 GCXVII Activity, the SUSD, cut in and cut out operations are operated for 4.75 hours. Therefore, the emissions were normalized based on 4.75 hours of operation in a day. (Document ID: 11352541 (pg: 217/241).
1255	2798-V5	RLP00000000006	L1311	119	471815.990	3343827.999	5.835E-02	13.716	369.261	9.565	0.610	
1255	2798-V5	RLP00000000005	L1312	118	471816.026	3343841.961	5.835E-02	13.716	369.261	9.565	0.610	
1255	2798-V5	RLP00000000004	L1313	117	471815.969	3343857.032	5.835E-02	13.716	369.261	9.565	0.610	
1255	2798-V5	RLP00000000003	L1314	116	471815.997	3343868.002	5.835E-02	13.716	369.261	9.565	0.610	
1255	2269-V7	EQT00000000353	L1315	544	472811.000	3343073.000	1.260E-03	3.658	349.817	1.631	0.052	-
1255	2269-V7	EQT00000000685	L1322	044	472314.042	3343661.949	1.512E-02	2.420	477.594	65.666	0.101	-
1255	2270-V6	EQT00000000279	L1323	533F	472357.000	3343660.000	1.260E-04	5.919	319.261	8.053	4.267	-
1255	2040-V10	EQT00000000261	L1324	345	472312.996	3343704.947	5.468E-01	23.774	338.706	12.229	1.067	-
1255	2270-V6	RLP00000000024	L1325	524C	472388.575	3343643.809	1.033E-01	10.058	533.150	27.167	0.152	-
1255	2270-V6	RLP00000000023	L1326	524B	472395.312	3343643.792	1.033E-01	10.058	533.150	27.167	0.152	-
1255	2270-V6	RLP00000000022	L1327	524A	472401.085	3343643.778	1.033E-01	10.058	533.150	27.167	0.152	-
1255	2270-V6	EQT00000000278	L1328	523B	472406.859	3343643.763	6.242E-05	1.829	299.817	0.725	0.305	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2270-V6	RLP00000000021	L1329	524	472406.859	3343643.763	1.260E-03	6.096	533.150	27.167	0.152	-
1255	2270-V6	EQT00000000277	L1330	523A	472412.633	3343643.749	6.242E-05	1.829	299.817	0.725	0.305	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2106-V7	EQT00000000068	L1331	033	472780.965	3343317.036	2.291E+00	30.480	366.483	28.109	5.410	-
1255	2040-V10	EQT00000000392	L1332	346	472371.963	3343696.044	1.052E+00	29.870	316.483	12.713	0.914	-
1255	2040-V10	EQT00000000393	L1333	347	472371.963	3343696.044	1.222E-01	30.175	344.261	3.688	0.762	-
1255	2106-V7	EQT00000000067	L1334	032	472780.978	3343361.029	2.291E+00	30.480	366.483	28.109	5.410	-
1255	2270-V6	RLP00000000025	L1338	524D	472742.258	3343463.406	1.033E-01	10.058	533.150	27.167	0.152	-
1255	2106-V7	EQT00000000072	L1339	533N	472808.040	3343407.947	1.260E-04	13.716	315.372	8.879	9.906	-
1255	2270-V6	RLP00000000026	L1340	524E	472748.032	3343463.392	1.033E-01	10.058	533.150	27.167	0.152	-
1255	2270-V6	EQT00000000602	L1341	22	472377.700	3343897.800	5.040E-03	12.802	644.261	4.877	0.610	-
1255	2350-V9	EQT00000000496	L1342	533E	472213.003	3344042.960	1.260E-04	12.802	319.261	13.564	3.871	-
1255	3021-V6	EQT00000000377	L1343	101	472724.990	3343600.968	4.284E-02	17.069	305.372	15.947	0.457	-
1255	3021-V6	EQT00000000375	L1344	100A	472825.046	3343512.955	1.260E-03	19.812	322.039	11.771	0.610	-
1255	2106-V7	EQT00000000062	L1345	007	472966.976	3343391.042	1.065E+00	45.720	429.817	13.701	3.200	-
1255	3021-V6	EQT00000000383	L1348	152	472772.980	3343588.992	3.351E-03	3.048	366.483	64.502	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	EQT00000000598	L1349	158	472705.040	3343665.954	1.260E-03	4.572	533.150	140.126	0.076	-
1255	2350-V9	EQT00000000495	L1350	533D	472340.022	3344003.964	2.520E-04	10.668	319.261	11.723	3.807	-
1255	3021-V6	EQT00000000376	L1351	100C	472851.967	3343581.039	1.260E-03	16.398	287.594	23.351	0.387	-
185422	0520-00471-V1	ARE00000000001	L1352	559	471898.320	3344421.299	5.330E-01	1.000	0.000	0.001	1.000	Per current permit, this source operates intermittently. Therefore, the emissions were normalized.
185422	0520-00471-V1	EQT00000000001	L1353	23	471898.320	3344421.299	3.447E+00	24.384	616.483	18.370	1.981	-
185422	0520-00471-V1	EQT00000000002	L1354	29	471898.320	3344421.299	3.276E-01	33.528	399.817	16.170	0.610	-
185422	0520-00471-V1	EQT00000000003	L1355	200	471898.320	3344421.299	6.376E-01	25.908	360.928	13.201	1.067	-
185422	0520-00471-V1	EQT00000000004	L1356	202	471898.320	3344421.299	5.418E-02	20.422	360.928	11.500	0.914	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
185422	0520-00471-V1	EQT00000000005	L1357	203	471898.320	3344421.299	1.562E-01	16.154	360.928	5.087	1.042	-
185422	0520-00471-V1	EQT00000000006	L1358	204	471898.320	3344421.299	1.562E-01	19.507	360.928	5.087	1.042	-
185422	0520-00471-V1	EQT00000000007	L1359	205	471898.320	3344421.299	1.562E-01	17.069	360.928	5.087	1.042	-
185422	0520-00471-V1	EQT00000000008	L1360	209	471898.320	3344421.299	5.796E-02	39.624	302.594	10.860	0.509	-
185422	0520-00471-V1	EQT00000000009	L1361	210	471898.320	3344421.299	5.796E-02	39.624	302.594	10.860	0.509	-
185422	0520-00471-V1	EQT00000000010	L1362	211	471898.320	3344421.299	1.562E-01	20.117	360.928	5.148	1.036	-
185422	0520-00471-V1	EQT00000000011	L1363	212	471898.320	3344421.299	1.008E-02	4.572	313.706	20.516	0.433	-
185422	0520-00471-V1	EQT00000000012	L1364	213	471898.320	3344421.299	3.780E-03	3.048	313.706	13.350	0.305	-
185422	0520-00471-V1	EQT00000000013	L1365	214	471898.320	3344421.299	5.040E-03	2.438	313.706	26.365	0.253	-
185422	0520-00471-V1	EQT00000000014	L1366	215	471898.320	3344421.299	1.260E-03	9.449	352.594	24.799	0.152	-
185422	0520-00471-V1	EQT00000000015	L1367	216	471898.320	3344421.299	1.638E-02	42.062	338.706	23.223	0.509	-
185422	0520-00471-V1	EQT00000000016	L1368	217	471898.320	3344421.299	5.040E-03	10.058	313.706	6.959	0.509	-
185422	0520-00471-V1	EQT00000000017	L1369	218	471898.320	3344421.299	7.560E-03	44.196	324.817	20.861	0.357	-
185422	0520-00471-V1	EQT00000000018	L1370	219	471898.320	3344421.299	6.300E-03	42.672	324.817	14.530	0.405	-
185422	0520-00471-V1	EQT00000000019	L1371	220	471898.320	3344421.299	3.515E-01	20.117	413.706	23.040	1.015	-
185422	0520-00471-V1	EQT00000000020	L1372	221	471898.320	3344421.299	6.300E-03	41.453	313.706	14.033	0.405	-
185422	0520-00471-V1	EQT00000000021	L1373	222	471898.320	3344421.299	2.520E-03	25.908	322.039	15.411	0.253	-
185422	0520-00471-V1	EQT00000000022	L1374	223	471898.320	3344421.299	2.520E-03	32.309	322.039	17.819	0.204	-
185422	0520-00471-V1	EQT00000000023	L1375	224	471898.320	3344421.299	1.260E-03	18.288	394.261	9.367	0.204	-
185422	0520-00471-V1	EQT00000000024	L1376	225	471898.320	3344421.299	1.260E-03	18.288	394.261	9.367	0.204	-
185422	0520-00471-V1	EQT00000000025	L1377	226	471898.320	3344421.299	1.260E-03	18.288	394.261	9.367	0.204	-
185422	0520-00471-V1	EQT00000000026	L1378	227	471898.320	3344421.299	1.260E-03	25.908	313.706	0.527	0.533	-
185422	0520-00471-V1	EQT00000000027	L1379	229	471898.320	3344421.299	1.260E-03	38.100	313.706	0.527	0.533	-
185422	0520-00471-V1	EQT00000000028	L1380	230	471898.320	3344421.299	1.260E-03	25.908	313.706	232.559	0.040	-
185422	0520-00471-V1	EQT00000000029	L1381	231	471898.320	3344421.299	2.520E-03	4.572	313.706	15.085	0.244	-
185422	0520-00471-V1	EQT00000000030	L1382	232	471898.320	3344421.299	2.520E-03	32.309	313.706	15.085	0.244	-
185422	0520-00471-V1	EQT00000000031	L1383	233	471898.320	3344421.299	1.260E-03	9.144	313.706	232.559	0.040	-
185422	0520-00471-V1	EQT00000000032	L1384	234	471898.320	3344421.299	1.260E-03	1.524	313.706	16.548	0.152	-
185422	0520-00471-V1	EQT00000000033	L1385	235	471898.320	3344421.299	1.260E-03	18.288	491.483	364.276	0.040	-
185422	0520-00471-V1	EQT00000000034	L1386	236	471898.320	3344421.299	3.780E-03	25.908	322.039	35.043	0.204	-
185422	0520-00471-V1	EQT00000000035	L1387	237	471898.320	3344421.299	3.780E-03	25.908	322.039	35.043	0.204	-
185422	0520-00471-V1	EQT00000000036	L1388	238	471898.320	3344421.299	2.520E-03	25.908	322.039	15.411	0.253	-
185422	0520-00471-V1	EQT00000000037	L1389	239	471898.320	3344421.299	2.520E-03	3.962	313.706	31.717	0.152	-
185422	0520-00471-V1	EQT00000000038	L1390	240	471898.320	3344421.299	1.260E-03	3.048	313.706	52.956	0.076	-
185422	0520-00471-V1	EQT00000000039	L1391	241	471898.320	3344421.299	1.260E-03	23.165	322.039	25.481	0.152	-
185422	0520-00471-V1	EQT00000000040	L1392	242	471898.320	3344421.299	2.520E-03	32.309	322.039	15.411	0.253	-
185422	0520-00471-V1	EQT00000000041	L1393	244	471898.320	3344421.299	8.820E-03	20.117	363.706	11.500	0.914	-
185422	0520-00471-V1	EQT00000000042	L1394	245	471898.320	3344421.299	1.260E-03	17.069	313.706	6.373	0.204	-
185422	0520-00471-V1	EQT00000000043	L1395	246	471898.320	3344421.299	1.260E-03	3.048	313.706	12.290	0.204	-
185422	0520-00471-V1	EQT00000000044	L1396	247	471898.320	3344421.299	1.940E-01	41.910	385.928	26.786	1.219	-
185422	0520-00471-V1	EQT00000000045	L1397	248	471898.320	3344421.299	2.520E-03	32.004	366.483	25.119	0.204	-
185422	0520-00471-V1	EQT00000000046	L1398	249	471898.320	3344421.299	1.260E-03	18.898	322.039	25.481	0.152	-
185422	0520-00471-V1	EQT00000000047	L1399	252	471898.320	3344421.299	3.780E-03	32.004	355.372	36.817	0.204	-
185422	0520-00471-V1	EQT00000000048	L1400	253	471898.320	3344421.299	3.780E-03	25.908	313.706	10.830	1.000	-
185422	0520-00471-V1	EQT00000000049	L1401	254	471898.320	3344421.299	1.260E-03	4.877	313.706	27.581	0.152	-
185422	0520-00471-V1	EQT00000000050	L1402	255	471898.320	3344421.299	5.040E-03	32.309	366.483	20.135	0.305	-
185422	0520-00471-V1	EQT00000000051	L1403	256	471898.320	3344421.299	8.820E-03	32.309	358.150	21.214	0.405	-
185422	0520-00471-V1	EQT00000000052	L1404	257	471898.320	3344421.299	3.780E-03	32.309	322.039	31.535	0.204	-
185422	0520-00471-V1	EQT00000000053	L1405	258	471898.320	3344421.299	5.040E-03	32.309	322.039	21.235	0.305	-
185422	0520-00471-V1	EQT00000000054	L1406	259	471898.320	3344421.299	2.520E-03	28.651	322.039	22.077	0.204	-
185422	0520-00471-V1	EQT00000000055	L1407	260	471898.320	3344421.299	2.520E-02	18.288	322.039	16.005	0.405	-
185422	0520-00471-V1	EQT00000000057	L1408	263	471898.320	3344421.299	3.780E-03	16.764	326.483	35.116	0.253	-
185422	0520-00471-V1	EQT00000000058	L1409	264	471898.320	3344421.299	3.780E-03	16.764	326.483	35.116	0.253	-
185422	0520-00471-V1	EQT00000000059	L1410	265	471898.320	3344421.299	3.780E-03	16.764	326.483	35.116	0.253	-
185422	0520-00471-V1	EQT00000000060	L1411	266	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000061	L1412	267	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

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185422	0520-00471-V1	EQT00000000062	L1413	268	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000063	L1414	269	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000064	L1415	270	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000065	L1416	271	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000066	L1417	272	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000069	L1418	533I	471898.320	3344421.299	6.300E-03	3.658	322.039	13.917	2.438	-
185422	0520-00471-V1	EQT00000000070	L1419	533J	471898.320	3344421.299	1.386E-02	8.534	322.039	7.315	5.182	-
185422	0520-00471-V1	EQT00000000071	L1420	564	471898.320	3344421.299	1.072E-02	4.572	366.483	0.001	0.204	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
185422	0520-00471-V1	EQT00000000072	L1421	273	471898.320	3344421.299	1.260E-03	6.096	313.706	25.871	0.152	-
185422	0520-00471-V1	EQT00000000073	L1422	274	471898.320	3344421.299	3.780E-03	35.966	322.039	15.411	0.253	-
185422	0520-00471-V1	EQT00000000074	L1423	275	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000075	L1424	276	471898.320	3344421.299	3.780E-03	32.309	322.039	31.535	0.204	-
185422	0520-00471-V1	EQT00000000076	L1425	277	471898.320	3344421.299	5.040E-03	32.309	322.039	21.235	0.305	-
185422	0520-00471-V1	EQT00000000084	L1426	279	471898.320	3344421.299	3.780E-03	34.366	322.039	37.463	0.204	-
185422	0520-00471-V1	EQT00000000085	L1427	280	471898.320	3344421.299	5.040E-03	34.442	322.039	21.235	0.305	-
185422	0520-00471-V1	EQT00000000086	L1428	281	471898.320	3344421.299	1.260E-03	14.478	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000087	L1429	282	471898.320	3344421.299	1.462E-01	41.300	385.928	20.199	1.219	-
185422	0520-00471-V1	EQT00000000088	L1430	283	471898.320	3344421.299	3.780E-03	10.363	355.372	36.817	0.204	-
185422	0520-00471-V1	EQT00000000089	L1431	284	471898.320	3344421.299	1.260E-03	14.478	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000090	L1432	285	471898.320	3344421.299	3.780E-03	10.363	355.372	36.817	0.204	-
185422	0520-00471-V1	EQT00000000091	L1433	286	471898.320	3344421.299	3.780E-03	21.946	313.706	8.580	0.433	-
185422	0520-00471-V1	EQT00000000093	L1434	604	471898.320	3344421.299	1.147E-01	9.296	672.039	3.261	1.372	-
185422	0520-00471-V1	EQT00000000094	L1435	605	471898.320	3344421.299	1.147E-01	9.296	672.039	3.261	1.372	-
185422	0520-00471-V1	EQT00000000099	L1436	610	471898.320	3344421.299	1.260E-03	30.480	299.817	0.001	1.000	-
185422	0520-00471-V1	EQT00000000100	L1437	611	471898.320	3344421.299	1.260E-03	6.096	299.817	0.001	1.000	-
185422	0520-00471-V1	FUG00000000001	L1438	349K	471898.320	3344421.299	1.386E-02	1.000	0.000	0.001	1.000	-
1255	3021-V6	EQT00000000382	L1439	533L	472851.047	3343637.002	5.040E-04	17.221	304.261	9.912	11.616	-
1255	2798-V5	EQT00000000677	L1440	036	472749.014	3343741.974	1.726E-04	2.566	477.594	68.732	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	EQT00000000680	L1441	039	472749.024	3343745.963	1.726E-04	2.566	477.594	68.732	0.101	
1255	2359-V6	EQT00000000341	L1442	554	472414.603	3344043.780	1.525E-01	3.048	299.817	0.001	1.000	-
1255	2798-V5	RLP00000000011	L1443	124	472819.006	3343715.980	2.948E-01	16.764	364.261	6.587	0.747	-
1255	2798-V5	RLP00000000012	L1444	125	472819.035	3343727.948	2.948E-01	16.764	364.261	6.587	0.747	-
1255	2695-V16	EQT00000000433	L1445	20	472318.988	3344172.010	5.753E-04	16.968	644.261	10.129	0.610	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2695-V16	EQT00000000442	L1446	529	472302.961	3344189.005	7.308E-02	18.288	310.928	19.404	0.305	-
1255	2798-V5	EQT00000000018	L1447	106	472854.989	3343713.010	4.284E-02	21.641	333.150	0.735	1.676	-
1255	2798-V5	EQT00000000021	L1448	107	472854.989	3343713.010	4.284E-02	21.641	333.150	0.646	1.676	-
1255	2798-V5	EQT00000000679	L1449	038	472773.954	3343787.013	1.726E-04	2.566	477.594	68.732	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2695-V16	EQT00000000554	L1450	309	472321.436	3344188.737	1.553E-01	22.860	310.928	4.852	0.610	
1255	2798-V5	EQT00000000678	L1451	037	472773.981	3343797.983	1.726E-04	2.566	477.594	68.732	0.101	
1255	2695-V16	EQT00000000443	L1452	530	472312.029	3344197.958	3.193E-05	3.048	298.150	0.003	0.610	
1255	2798-V5	EQT00000000600	L1453	160	472649.961	3343921.960	5.040E-03	4.572	533.150	94.387	0.076	-
1255	2798-V5	RLP00000000013	L1454	126	472820.023	3343777.036	5.835E-02	16.764	364.261	6.587	0.747	Based on OO8 GCXVII Activity, the SUSD, cut in and cut out operations are operated for 4.75 hours. Therefore, the emissions were normalized based on 4.75 hours of operation in a day. (Document ID: 11352541 (pg: 217/241).
1255	2798-V5	RLP00000000014	L1455	127	472820.048	3343787.009	5.835E-02	16.764	364.261	6.587	0.747	

$PM_{2.5}$ 24-hr NAAQS Offsite Inventory Sources

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1255	2695-V16	EQT00000000591	L1456	310	472378.955	3344178.951	3.418E-03	1.829	299.817	0.024	0.610	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	EQT00000000593	L1457	533Q	472837.041	3343810.016	1.260E-03	12.192	304.261	8.909	5.486	-
1255	2695-V16	EQT00000000432	L1458	15	472438.967	3344165.946	6.300E-02	38.710	505.372	6.840	1.448	-
1255	2216-V6	EQT00000000025	L1459	533G	472807.694	3343849.982	1.260E-03	12.497	304.261	11.723	6.096	-
1255	2695-V16	EQT00000000444	L1463	533C	472380.015	3344255.964	1.260E-04	11.582	302.594	15.795	7.925	-
1255	2798-V5	EQT00000000395	L1464	149	472706.972	3343978.000	6.300E-03	30.480	323.428	102.413	0.076	-
1255	Regper-ENG	EQT00000000688	L1465	045	472694.115	3343992.992	1.438E-05	1.000	0.000	0.001	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	Regper-ENG	EQT00000000689	L1466	046	472694.115	3343992.992	1.438E-05	1.000	0.000	0.001	1.000	
1255	2798-V5	TRT00000000001	L1467	019A	472894.020	3343891.987	1.512E-02	19.812	644.261	4.761	0.914	-
1255	2359-V6	EQT00000000334	L1468	133	473009.628	3343789.643	1.260E-03	7.315	299.817	10.098	1.006	-
1255	2798-V5	EQT00000000601	L1469	161	472744.034	3344061.017	3.780E-03	6.300	533.150	9.010	0.457	-
1255	2798-V5	EQT00000000011	L1470	533O	472776.018	3344037.002	1.260E-03	8.586	305.372	9.805	4.877	-
1255	Regper-ENG	EQT00000000710	L1471	043	472549.055	3344244.457	2.733E-04	3.048	819.261	136.800	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2206-V3	EQT00000000139	L1472	26	472490.851	3344364.393	2.772E-02	5.486	505.372	13.664	0.610	-
1255	2206-V3	EQT00000000140	L1473	27	472490.851	3344364.393	6.098E-01	13.716	1273.000	20.000	4.471	LDEQ flare default stack temperature and stack velocity were utilized. The stack diameter is calculated based on the permitted heat input.
1255	2359-V6	EQT00000000587	L1474	031B	472490.851	3344364.393	2.158E-04	2.819	864.817	76.487	0.128	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2359-V6	EQT00000000588	L1475	031C	472490.851	3344364.393	2.445E-04	3.200	758.706	86.103	0.152	
1255	2359-V6	EQT00000000589	L1476	031D	472490.851	3344364.393	2.790E-03	3.328	683.150	133.414	0.128	
1255	2216-V6	EQT00000000606	L1477	533R	472490.851	3344364.393	1.260E-03	4.267	304.261	13.158	1.000	-
1255	2359-V6	EQT00000000675	L1478	031A	472490.851	3344364.393	1.726E-04	2.234	690.372	131.975	0.128	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2359-V6	EQT00000000676	L1479	031E	472490.851	3344364.393	2.158E-04	3.328	759.817	84.552	0.152	
84822	0520-00523-V0	EQT00000000001	L1495	001	469993.108	3346777.829	2.268E-01	1.000	0.000	0.001	1.000	-
84822	0520-00523-V0	EQT00000000002	L1496	002	469993.518	3346787.025	2.772E-02	1.000	0.000	0.001	1.000	-
196978	0520-00492-V1	GRP00000000002	L1606	Boilers and Superheaters Group	470666.797	3340155.010	4.309E-01	60.960	533.150	22.689	1.676	The stack parameters were obtained from EDMS Document ID: 12891144 (Pg: 26/69). The worst-case stack parameters between boilers and superheaters were utilized.

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
201334	0520-00504-V0	EQT00000000017	L49	P05TU01	466843.037	3329201.005	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000018	L50	P05TU02	466842.025	3329248.989	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000019	L51	P05TU03	466841.980	3329297.968	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000020	L52	P05TU04	466840.971	3329346.950	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000060	L53	ESSGEN05	466845.964	3329437.025	7.048E-04	4.877	727.594	45.110	0.250	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000025	L54	P05TO01	466847.048	3329509.049	7.308E-02	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000042	L55	P05H01	466869.968	3329537.016	5.799E-04	30.480	566.483	7.620	1.036	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000013	L56	P04TU01	467005.022	3329202.956	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000014	L57	P04TU02	467004.013	3329252.049	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000015	L58	P04TU03	467003.000	3329300.033	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000016	L59	P04TU04	467001.991	3329349.015	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000059	L60	ESSGEN04	467001.023	3329411.959	7.048E-04	4.877	727.594	45.110	0.250	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000024	L61	P04TO01	467007.968	3329511.004	7.308E-02	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000041	L62	P04H01	467032.048	3329539.964	5.799E-04	30.480	566.483	7.620	1.036	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000009	L66	P03TU01	467166.043	3329205.024	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000010	L67	P03TU02	467165.033	3329254.005	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000011	L68	P03TU03	467164.987	3329302.984	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000012	L69	P03TU04	467163.973	3329350.969	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000058	L70	ESSGEN03	467162.042	3329414.026	7.048E-04	4.877	727.594	45.110	0.250	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000023	L71	P03TO01	467170.045	3329512.957	7.308E-02	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000040	L72	P03H01	467192.968	3329542.032	5.799E-04	30.480	566.483	7.620	1.036	Based on the March 2017 modeling report submitted to LDEQ, only two (2) out of five (5) Hot Oil Heaters were modeled. Therefore, EQT00000000039, EQT00000000039, and EQT00000000040 were excluded from this modeling analysis.
201334	0520-00504-V0	EQT00000000030	L73	GFLR2W	467224.966	3329059.020	2.812E+00	45.720	1273.150	20.001	16.785	-
201334	0520-00504-V0	EQT00000000028	L74	GFLR2D	467263.992	3329059.015	3.116E+00	45.720	1273.150	20.001	17.776	-
201334	0520-00504-V0	EQT00000000031	L75	DFLARE01	467286.997	3328920.986	1.260E-03	106.680	1273.150	20.001	0.314	-
201334	0520-00504-V0	EQT00000000033	L76	WFLARE01	467287.006	3328923.978	1.260E-03	106.680	1273.150	20.001	0.354	-
201334	0520-00504-V0	EQT00000000005	L77	P02TU01	467328.031	3329207.977	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000006	L78	P02TU02	467327.017	3329255.961	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000007	L79	P02TU03	467326.007	3329305.054	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000008	L80	P02TU04	467324.996	3329354.036	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000057	L81	ESSGEN02	467324.023	3329415.982	7.048E-04	4.877	727.594	45.110	0.250	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000022	L82	P02TO01	467330.969	3329516.024	7.308E-02	22.860	1088.706	15.240	2.286	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
201334	0520-00504-V0	EQT00000000039	L83	P02H01	467355.044	3329543.988	5.799E-04	30.480	566.483	7.620	1.036	Based on the March 2017 modeling report submitted to LDEQ, only two (2) out of five (5) Hot Oil Heaters were modeled. Therefore, EQT00000000039, EQT00000000039, and EQT00000000040 were excluded from this modeling analysis.
201334	0520-00504-V0	EQT00000000034	L84	WFLARE02	467471.003	3328840.989	1.260E-03	106.680	1273.150	20.001	0.354	-
201334	0520-00504-V0	EQT00000000032	L85	DFLARE02	467471.958	3328837.994	1.260E-03	106.680	1273.150	20.001	0.314	-
201334	0520-00504-V0	EQT00000000001	L86	P01TU01	467488.956	3329210.049	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000002	L87	P01TU02	467488.041	3329259.031	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000003	L88	P01TU03	467487.990	3329307.012	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000004	L89	P01TU04	467486.978	3329355.994	4.498E-01	46.330	647.039	30.480	3.109	-
201334	0520-00504-V0	EQT00000000056	L90	ESSGEN01	467485.045	3329419.051	7.048E-04	4.877	727.594	45.110	0.250	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000029	L91	GFLR1W	467505.000	3329062.955	2.812E+00	45.720	1273.150	20.001	16.785	Based on current permit (EDMS Document ID: 11210918) SR No. 181, both wet gas ground flares (EQT0029 and EQT0030) can only be operated simultaneously 1) during commissioning or 2) if the total gas volume simultaneously flared through both wet gas ground flares doesn't exceed the maximum gas volume from one wet gas ground flare alone. Therefore, only modeled one dry gas ground flare (Model ID: L73) to avoid double-counting.
201334	0520-00504-V0	EQT00000000021	L92	P01TO01	467493.045	3329517.983	7.308E-02	22.860	1088.706	15.240	2.286	-
201334	0520-00504-V0	EQT00000000038	L93	P01H01	467515.967	3329546.948	5.799E-04	30.480	566.483	7.620	1.036	Based on current permit (EDMS Document ID: 11210918) SR No. 180, based on the March 2017 modeling report submitted to LDEQ, only two (2) out of five (5) Hot Oil Heaters were modeled. Therefore, EQT00000000039, EQT00000000039, and EQT00000000040 were excluded from this modeling analysis.
201334	0520-00504-V0	EQT00000000027	L94	GFLR1D	467544.025	3329062.950	3.116E+00	45.720	1273.150	20.001	17.776	Based on current permit (EDMS Document ID: 11210918) SR No. 180, both dry gas ground flares (EQT0027 and EQT0028) can only be operated simultaneously 1) during commissioning or 2) if the total gas volume simultaneously flared through both dry gas ground flares doesn't exceed the maximum gas volume from one dry gas ground flare alone. Therefore, only modeled one dry gas ground flare (Model ID: L74) to avoid double-counting.
201334	0520-00504-V0	EQT00000000048	L95	SWP2P01	467571.964	3329649.948	3.524E-04	7.620	665.372	56.693	0.305	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000049	L96	SWP2P02	467578.998	3329650.038	3.524E-04	7.620	665.372	56.693	0.305	
201334	0520-00504-V0	EQT00000000050	L97	SWP2P03	467587.959	3329650.012	5.034E-05	7.620	665.372	56.693	0.229	
201334	0520-00504-V0	EQT00000000026	L98	CVTO	467691.967	3329433.956	9.702E-02	22.860	1255.372	15.850	2.286	-
201334	0520-00504-V0	EQT00000000053	L99	LNGBP2	467738.992	3329204.992	5.034E-05	7.620	665.372	56.693	0.229	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000052	L100	LNGBP1	467739.010	3329210.976	3.524E-04	7.620	665.372	56.693	0.305	
201334	0520-00504-V0	EQT00000000061	L101	MAGEN	467734.953	3329405.019	3.596E-04	4.877	727.594	45.110	0.250	
201334	0520-00504-V0	EQT00000000062	L102	CRGEN	467717.047	3329968.992	7.048E-04	4.877	727.594	45.110	0.250	
201334	0520-00504-V0	EQT00000000035	L103	MFLARE01	467786.005	3328871.976	2.885E-01	57.912	1273.150	20.001	5.200	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
201334	0520-00504-V0	EQT00000000036	L104	MFLARE01-MSS	467786.005	3328871.976	5.811E-03	57.912	1273.150	20.001	9.775	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
201334	0520-00504-V0	EQT00000000045	L105	SWP1P01	467855.987	3328814.039	1.007E-04	7.620	665.372	56.693	0.305	
201334	0520-00504-V0	EQT00000000046	L106	SWP1P02	467855.966	3328806.947	5.034E-05	7.620	665.372	56.693	0.229	
201334	0520-00504-V0	EQT00000000047	L107	SWP1P03	467855.966	3328806.947	5.034E-05	7.620	665.372	56.693	0.229	
201334	0520-00504-V0	EQT00000000063	L108	LOGEN	467876.026	3329176.002	7.048E-04	4.877	727.594	45.110	0.250	
201334	0520-00504-V0	EQT00000000055	L109	FWP02	467849.995	3329962.951	2.589E-04	7.620	665.372	56.693	0.213	
201334	0520-00504-V0	EQT00000000054	L110	FWP01	467857.029	3329963.042	2.589E-04	7.620	665.372	56.693	0.213	
99407	0560-00184-V10	EQT00000000087	L111	EU11G	467167.900	3325065.000	3.164E-04	3.048	745.928	72.847	0.155	
99407	0560-00184-V10	EQT00000000088	L112	EU11H	467167.900	3325065.000	3.164E-04	3.048	745.928	72.847	0.155	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000089	L113	EU11I	467167.900	3325065.000	3.164E-04	3.048	745.928	72.847	0.155	
99407	0560-00184-V10	EQT00000000090	L119	EU05F	467307.600	3324638.000	1.927E-03	12.192	729.261	75.590	0.387	
99407	0560-00184-V10	EQT00000000091	L120	EU05G	467326.000	3324637.999	1.927E-03	12.192	729.261	75.590	0.387	
99407	0560-00184-V10	EQT00000000092	L121	EU05H	467344.600	3324639.000	1.927E-03	12.192	729.261	75.590	0.387	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
99407	0560-00184-V10	EQT00000000096	L122	EU15J	467622.900	3325082.000	1.229E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000095	L123	EU15I	467624.200	3325016.000	1.229E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000094	L124	EU15H	467628.900	3324712.000	1.293E+00	45.720	809.261	43.891	4.572	-
99407	0560-00184-V10	EQT00000000081	L125	EU13C	467808.800	3325051.000	1.613E-01	64.922	1088.706	12.878	3.886	-
99407	0560-00184-V10	EQT00000000082	L126	EU13D	467808.800	3325051.000	1.613E-01	64.922	1088.706	12.878	3.886	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000093	L127	EU15G	467615.400	3324641.000	1.293E+00	45.720	809.261	43.891	4.572	-
99407	0560-00184-V10	EQT00000000044	L128	EU11D	467278.800	3323869.000	3.164E-04	3.048	745.928	72.847	0.155	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000045	L129	EU11E	467278.800	3323869.000	3.164E-04	3.048	745.928	72.847	0.155	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
99407	0560-00184-V10	EQT00000000046	L130	EU11F	467278.800	3323869.000	3.164E-04	3.048	745.928	72.847	0.155	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000073	L131	EU15F	467635.400	3324347.000	1.229E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000072	L132	EU15E	467622.000	3324271.000	1.229E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000053	L133	EU05E	467366.400	3323846.999	1.927E-03	12.192	729.261	75.590	0.387	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000052	L134	EU05D	467366.700	3323828.000	1.927E-03	12.192	729.261	75.590	0.387	
99407	0560-00184-V10	EQT00000000051	L135	EU05C	467367.000	3323810.000	1.927E-03	12.192	729.261	75.590	0.387	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
99407	0560-00184-V10	EQT00000000079	L136	EU20	467911.900	3324747.000	8.568E-02	13.716	1273.150	19.995	1.189	Updated the stack parameters based on September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121).
99407	0560-00184-V10	EQT00000000084	L137	SSM	467911.900	3324747.000	1.464E+01	13.716	1273.150	19.995	15.423	
99407	0560-00184-V10	EQT00000000071	L138	EU15D	467636.800	3323973.000	1.229E+00	45.720	600.372	32.614	4.572	-
99407	0560-00184-V10	EQT00000000083	L139	EU20A	467390.700	3323569.000	1.012E+00	57.912	1273.150	19.995	5.761	Updated the stack parameters based on September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121).

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
17904	0520-00156-V4	EQT00000000005	L140	8-90	467000.233	3334799.757	2.086E-03	4.572	755.372	0.378	0.134	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
99407	0560-00184-V10	EQT00000000070	L144	EU15C	467628.500	3323901.000	1.293E+00	45.720	809.261	43.891	4.572	-
81859	0520-00219-V6	EQT00000000004	L147	3-99	466600.157	3335399.908	8.820E-03	7.010	651.483	138.379	0.152	-
99407	0560-00184-V10	EQT00000000001	L148	EU01A	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	Consistent with the air dispersion modeling analysis performed for this facility, the vaporization sources were excluded from the off-property inventory. Refer to April 2013 air dispersion modeling report (pg 16/105) (EDMS Document ID: 8785365).
99407	0560-00184-V10	EQT00000000002	L149	EU01B	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000003	L150	EU01C	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000004	L151	EU01D	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000005	L152	EU01E	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000006	L153	EU01F	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000007	L154	EU01G	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000008	L155	EU01H	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000009	L156	EU01I	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000010	L157	EU01J	467247.295	3323081.245	1.121E-01	13.106	299.261	8.534	1.271	
99407	0560-00184-V10	EQT00000000016	L158	EU03A	467247.295	3323081.245	3.780E-03	34.686	394.261	0.030	0.381	-
99407	0560-00184-V10	EQT00000000021	L159	EU03B	467247.295	3323081.245	3.780E-03	34.686	394.261	0.030	0.381	-
99407	0560-00184-V10	EQT00000000041	L160	EU11A	467455.000	3323328.000	3.740E-04	3.048	658.150	74.981	0.076	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000042	L161	EU11B	467455.000	3323328.000	3.740E-04	3.048	658.150	74.981	0.076	
99407	0560-00184-V10	EQT00000000043	L162	EU11C	467455.000	3323328.000	3.740E-04	3.048	658.150	74.981	0.076	
99407	0560-00184-V10	EQT00000000069	L163	EU15B	467648.600	3323602.999	1.293E+00	45.720	809.261	43.891	4.572	-
99407	0560-00184-V10	EQT00000000068	L164	EU15A	467649.800	3323536.999	1.293E+00	45.720	809.261	43.891	4.572	-
81859	0520-00219-V6	EQT00000000005	L165	4-99	466600.817	3335680.373	4.603E-04	3.048	533.150	9.144	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
81859	Regper-Eng	EQT00000000006	L166	Emergency Diesel Engine	466600.817	3335680.373	1.870E-04	1.000	0.000	0.001	1.000	
81859	0520-00219-V6	SCN00000000001	L167	1-99SU/SD	466600.817	3335680.373	2.520E+00	1.000	0.000	0.001	1.000	It is an alternate operating scenario of EQT00000000002. The emissions from EQT00000000002 are modeled under Model ID: L114. Therefore, this source was excluded.
81859	0520-00219-V6	SCN00000000002	L168	2-99SU/SD	466600.817	3335680.373	2.520E+00	1.000	0.000	0.001	1.000	It is an alternate operating scenario of EQT00000000003. The emissions from EQT00000000003 are modeled under Model ID: L115. Therefore, this source was excluded.
81859	0520-00219-V6	EQT00000000002	L169	1-99	466601.009	3335680.261	2.520E+00	21.336	879.261	23.622	7.566	The stack diameter is calculated based on the permitted flow rate and stack velocity.
81859	0520-00219-V6	EQT00000000003	L170	2-99	466601.009	3335680.261	2.520E+00	21.336	879.261	36.363	6.094	The stack diameter is calculated based on the permitted flow rate and stack velocity.
99407	0560-00184-V10	EQT00000000056	L179	EU13A	467835.000	3323584.000	1.613E-01	64.922	1088.706	12.878	3.886	-
99407	0560-00184-V10	EQT00000000057	L180	EU13B	467835.000	3323584.000	1.613E-01	64.922	1088.706	12.878	3.886	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
99407	0560-00184-V10	EQT00000000022	L185	EU05B	467399.100	3322815.000	1.381E-03	7.202	744.261	63.901	0.357	
99407	0560-00184-V10	EQT00000000020	L186	EU05A	467403.910	3322816.000	1.381E-03	7.202	744.261	63.901	0.357	
99407	0560-00184-V10	EQT00000000047	L187	EU12A	468022.000	3323643.000	2.877E-04	3.048	658.150	74.981	0.076	
99407	0560-00184-V10	EQT00000000048	L188	EU12B	468022.000	3323643.000	2.877E-04	3.048	658.150	74.981	0.076	
99407	0560-00184-V10	EQT00000000049	L200	EU12C	467961.000	3323465.000	3.164E-04	3.048	745.928	72.847	0.155	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
99407	0560-00184-V10	EQT00000000050	L201	EU12D	467961.000	3323465.000	3.164E-04	3.048	745.928	72.847	0.155	Consistent with September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121), this source was excluded from this modeling analysis.
3439	0520-00048-V7	EQT00000000005	L202	10-87a	467523.467	3335054.618	2.394E-02	26.365	298.150	3.679	1.926	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3439	0520-00048-V7	FUG00000000006	L203	10-87	467523.468	3335054.951	2.284E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	EQT00000000006	L204	11-87a	467576.826	3335023.655	7.686E-02	14.478	298.150	2.131	2.914	-
3439	0520-00048-V7	FUG00000000004	L205	6-87	467576.826	3335023.655	1.512E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	FUG00000000007	L206	11-87	467576.826	3335023.655	4.300E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	EQT00000000010	L207	18a	467550.332	3335085.566	7.560E-03	23.165	298.150	9.702	0.305	-
3439	0520-00048-V7	EQT00000000011	L208	18b	467550.332	3335085.566	3.780E-03	21.641	298.150	10.647	0.411	-
3439	0520-00048-V7	FUG00000000012	L209	18	467550.332	3335085.566	3.938E-03	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	FUG00000000005	L210	9-87	467630.283	3334993.024	1.953E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
99407	0560-00184-V10	EQT00000000017	L211	EU04	467626.700	3322830.060	1.016E+00	57.912	1273.150	19.995	5.761	Updated the stack parameters based on September 2015 Modeling Report (EDMS Document ID: 9919180, pg: 113/121).
3439	0520-00048-V7	EQT00000000007	L212	12-87a	467630.373	3335023.497	4.284E-02	8.687	298.150	14.307	0.695	-
3439	0520-00048-V7	FUG00000000008	L213	12-87	467630.373	3335023.497	4.568E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	EQT00000000008	L214	14-87a	467710.416	3334961.982	2.520E-02	41.401	298.150	5.337	1.472	-
3439	0520-00048-V7	FUG00000000009	L215	14-87	467710.416	3334961.982	1.255E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000151	L216	2-12	467055.011	3335788.041	5.040E-03	39.624	310.928	24.079	0.253	-
3439	0520-00048-V7	FUG00000000013	L217	24	467763.873	3334931.130	5.437E-04	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000150	L218	1-12	467055.041	3335798.014	5.040E-03	39.624	310.928	24.079	0.253	-
1251	0520-00001-V20	EQT00000000187	L219	1-17	467055.041	3335798.014	1.260E-03	14.021	310.928	13.990	0.253	-
1251	0520-00001-V20	EQT00000000188	L220	2-17	467055.041	3335798.014	1.260E-03	27.737	310.928	9.327	0.253	-
1251	0520-00001-V20	EQT00000000189	L221	3-17	467055.041	3335798.014	1.134E-02	10.363	299.817	9.540	0.274	-
1251	0520-00001-V20	EQT00000000144	L222	3-07	467053.028	3335801.012	1.260E-03	25.146	322.039	23.683	0.610	-
1251	0520-00001-V20	EQT00000000026	L223	10-96	467095.030	3335773.959	4.536E-02	32.004	392.039	84.978	0.204	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1251	0520-00001-V20	EQT00000000092	L224	5-96	467062.980	3335811.953	1.260E-03	39.624	310.928	24.079	0.253	-
1251	0520-00001-V20	EQT00000000184	L225	1-16	467062.980	3335811.953	1.260E-03	39.624	310.928	24.079	0.253	-
1251	0520-00001-V20	EQT00000000033	L226	12-96	467079.980	3335796.942	3.611E-02	40.234	810.928	7.925	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3439	0520-00048-V7	EQT00000000026	L228	1-15	467537.682	3335269.996	1.260E-03	3.048	298.150	6.029	0.305	-
1251	0520-00001-V20	EQT00000000077	L229	4-96	467085.033	3335811.997	1.260E-03	46.025	310.928	26.304	0.076	-
1251	0520-00001-V20	EQT00000000113	L230	8-96	467095.045	3335810.970	1.260E-03	46.025	324.817	30.876	0.052	-
1251	0520-00001-V20	RLP00000000004	L231	11-96	467108.967	3335796.966	4.687E-01	60.960	534.817	30.267	1.219	Based on EDMS Document ID: 12637130, the emissions will not occur simultaneously from EQT00000000033 and RLP00000000004. Since the EQT00000000033 source was already included in the model, therefore excluded this source from the modeling analysis.
1251	0520-00001-V20	EQT00000000183	L232	17-15	467124.992	3335809.994	2.520E-02	4.572	310.928	14.752	2.134	-
3439	0520-00048-V7	FUG00000000010	L239	16-87	467684.276	3335177.257	2.520E-01	1.000	298.150	0.001	1.000	-
3439	0520-00048-V7	FUG00000000014	L240	26	467684.276	3335177.257	1.260E-03	1.000	298.150	0.001	1.000	-
3439	0520-00048-V7	FUG00000000015	L241	27	467684.276	3335177.257	1.575E-04	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000191	L242	2-18	467089.985	3335889.995	1.260E-03	17.678	299.817	5.974	0.204	-
1251	0520-00001-V20	EQT00000000178	L243	12-15	467093.000	3335897.000	4.662E-02	32.004	392.039	85.009	0.204	-
3439	0520-00048-V7	EQT00000000004	L244	9-87a	467631.098	3335269.720	1.008E-02	7.315	298.150	13.935	0.695	-
1251	0520-00001-V20	EQT00000000174	L245	6-15	467083.000	3335914.000	3.780E-03	46.025	310.928	26.304	0.076	-
1251	0520-00001-V20	EQT00000000177	L246	11-15	467094.000	3335903.000	2.835E-01	60.960	534.817	30.267	1.219	-
1251	0520-00001-V20	RLP00000000142	L247	8-15	467084.000	3335923.000	2.060E-01	40.234	810.928	7.925	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000181	L248	15-15	467118.000	3335893.000	1.151E-04	3.048	755.372	93.848	0.152	
1251	0520-00001-V20	EQT00000000142	L249	1-07	467165.000	3335842.000	1.260E-03	33.528	394.261	25.176	0.914	-
1251	0520-00001-V20	EQT00000000175	L250	7-15	467083.000	3335932.000	3.780E-03	46.025	310.928	26.304	0.076	-
1251	0520-00001-V20	EQT00000000176	L251	9-15	467083.000	3335932.000	2.520E-03	46.025	324.817	30.876	0.052	-
3439	0520-00048-V7	EQT00000000018	L252	1-12	467791.097	3335084.636	1.260E-04	3.240	298.150	9.851	1.000	-
3439	0520-00048-V7	FUG00000000003	L253	5-87	467791.097	3335084.636	9.800E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000091	L254	5-91	467061.000	3335960.999	4.599E-01	32.004	330.372	20.208	1.006	-
1251	0520-00001-V20	RLP00000000143	L255	10-15	467100.000	3335920.000	1.286E-01	44.196	588.706	12.192	0.405	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000152	L256	3-12	467218.000	3335808.000	1.260E-03	33.528	394.261	25.176	0.914	-
3439	0520-00048-V7	EQT00000000025	L257	EP-WP	467747.423	3335167.209	3.452E-04	1.524	727.594	37.673	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	FUG00000000004	L258	F24	467073.749	3335966.947	1.260E-03	12.192	298.706	0.001	1.000	-
1251	0520-00001-V20	EQT00000000055	L259	28-90	467111.000	3335927.000	8.278E-01	39.624	344.817	11.034	2.920	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3439	0520-00048-V7	ARE00000000001	L260	3-87	467791.188	3335115.663	3.404E-02	1.000	298.150	0.001	1.000	Excluded the Wind erosion emissions based on LDEQ's Air modeling guidance. Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	EQT00000000017	L261	ED-K2	467684.355	3335269.563	1.438E-05	1.524	938.706	5.145	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3439	0520-00048-V7	EQT00000000019	L262	ED-K1	467684.355	3335269.563	1.438E-05	1.524	938.706	6.809	0.076	
3439	0520-00048-V7	EQT00000000020	L263	3-12	467684.355	3335269.563	1.260E-03	3.048	298.150	6.029	0.305	-
3439	0520-00048-V7	EQT00000000021	L264	4-12	467684.355	3335269.563	1.260E-04	3.048	298.150	6.029	0.305	-
3439	0520-00048-V7	EQT00000000022	L265	5-12	467684.355	3335269.563	1.260E-03	3.048	298.150	6.029	0.305	-
3439	0520-00048-V7	EQT00000000023	L266	8-12	467684.355	3335269.563	3.780E-03	3.048	449.817	3.432	0.305	-
3439	N/A	EQT00000000031	L267	SNED-K1	467684.355	3335269.563	1.260E-04	1.000	0.000	0.001	1.000	-
3439	0520-00048-V7	FUG00000000018	L268	2-12	467684.355	3335269.563	6.531E-04	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	FUG00000000019	L269	6-12	467684.355	3335269.563	1.260E-03	1.000	298.150	0.001	1.000	-
3439	0520-00048-V7	FUG00000000020	L270	7-12	467684.355	3335269.563	1.260E-03	1.000	298.150	0.001	1.000	-
1251	0520-00001-V20	EQT00000000190	L271	1-18	467063.371	3336006.760	1.260E-03	9.144	310.928	9.449	1.000	-
1251	0520-00001-V20	EQT00000000047	L272	2-96	467086.321	3335984.640	1.260E-03	46.025	310.928	26.304	0.076	-
3439	0520-00048-V7	EQT00000000029	L273	2-21	467767.493	3335180.115	3.780E-04	1.000	298.150	0.001	1.000	-
3439	0520-00048-V7	FUG00000000025	L274	1-21	467767.493	3335180.115	5.408E-02	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000057	L275	3-01	467129.000	3335961.000	1.111E+00	60.655	345.928	16.124	1.372	-
1251	0520-00001-V20	FUG00000000003	L276	F12	467106.570	3335993.444	1.260E-03	30.480	298.706	0.001	1.000	-
1251	0520-00001-V20	EQT00000000118	L277	4-06	467182.000	3335917.000	1.512E-02	4.572	302.594	1.829	1.829	-
3439	0520-00048-V7	RLP00000000006	L278	4-87	467738.093	3335269.405	7.396E+00	60.960	1366.483	17.904	5.182	Per February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source was excluded since it is a duplicate of RLP0037.
3439	0520-00048-V7	FUG00000000002	L279	2-87	467738.094	3335269.738	9.450E-04	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000182	L280	16-15	467119.000	3336019.000	5.753E-05	1.829	703.706	114.513	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3439	0520-00048-V7	EQT00000000028	L281	EG-2	467736.549	3335301.102	1.870E-04	1.000	0.000	0.001	1.000	
3439	0520-00048-V7	FUG00000000017	L282	2-09	467738.184	3335300.543	1.890E-02	6.096	298.150	0.001	3.658	-
1251	0520-00001-V20	EQT00000000173	L283	5-15	467186.000	3335961.000	7.560E-03	46.025	310.928	26.304	0.076	-
1251	0520-00001-V20	FUG00000000008	L284	F25	467156.000	3335995.000	1.260E-03	30.480	298.706	0.001	1.000	-
1251	0520-00001-V20	EQT00000000180	L285	14-15	467140.000	3336020.000	1.638E-02	4.572	302.594	0.823	1.829	-
1251	0520-00001-V20	EQT00000000050	L286	23-90	467051.102	3336122.153	1.260E-03	6.096	299.817	7.864	0.305	-
3439	0520-00048-V7	EQT00000000016	L287	3-09	467764.956	3335300.132	2.381E-01	10.668	310.928	7.309	6.096	-
3439	0520-00048-V7	RLP00000000037	L288	1-09	467764.957	3335300.465	7.396E+00	60.655	374.817	28.042	2.438	-
1251	0520-00001-V20	EQT00000000090	L289	5-90	467054.968	3336126.574	1.260E-03	30.480	366.483	6.035	0.457	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1251	0520-00001-V20	EQT00000000114	L290	9-01	467059.772	3336123.235	1.260E-03	14.326	310.928	31.059	0.152	-
1251	0520-00001-V20	EQT00000000103	L291	6-90	467058.819	3336126.562	1.260E-03	30.480	366.483	6.035	0.457	-
1251	0520-00001-V20	EQT00000000063	L292	3-90	467054.981	3336131.006	1.260E-03	30.480	366.483	6.035	0.457	-
1251	0520-00001-V20	EQT00000000052	L293	25-90	467049.226	3336138.780	1.260E-03	10.668	299.817	7.864	0.305	-
1251	0520-00001-V20	EQT00000000075	L294	4-90	467058.833	3336130.995	1.260E-03	30.480	366.483	6.035	0.457	-
1251	0520-00001-V20	EQT00000000019	L295	1-90	467054.997	3336136.547	1.260E-03	24.384	366.483	6.035	0.457	-
1251	0520-00001-V20	EQT00000000051	L296	24-90	467067.480	3336124.320	1.260E-03	30.175	300.372	7.864	0.305	-
1251	0520-00001-V20	EQT00000000043	L297	2-90	467058.849	3336136.535	1.260E-03	30.480	366.483	6.035	0.457	-
1251	0520-00001-V20	EQT00000000037	L298	14-90	467067.499	3336130.969	1.260E-03	32.918	301.483	7.894	0.305	-
1251	0520-00001-V20	EQT00000000119	L299	5-06	467267.000	3335918.000	1.890E-02	4.572	302.594	2.499	1.829	-
1251	0520-00001-V20	EQT00000000054	L300	27-90	467092.510	3336122.029	1.260E-03	21.336	313.150	29.992	0.213	-
1251	0520-00001-V20	EQT00000000111	L301	8-90	467079.078	3336138.691	1.496E-05	15.545	418.706	20.117	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3439	0520-00048-V7	FUG00000000016	L302	28	467871.681	3335207.845	9.786E-03	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
1251	0520-00001-V20	EQT00000000040	L306	2-02	467080.078	3336150.877	1.260E-03	24.384	310.928	25.878	0.152	-
1251	0520-00001-V20	EQT00000000016	L307	1-81	467051.285	3336183.099	1.260E-03	8.534	303.150	15.850	0.213	-
1251	0520-00001-V20	EQT00000000049	L308	22-90	467119.454	3336115.299	1.260E-03	22.860	366.483	25.969	0.213	-
1251	0520-00001-V20	EQT00000000011	L309	1-02	467085.856	3336150.860	1.260E-03	24.384	310.928	25.878	0.152	-
1251	0520-00001-V20	EQT00000000108	L310	7-90	467118.510	3336121.951	1.260E-03	24.384	315.372	14.569	0.610	-
1251	0520-00001-V20	EQT00000000027	L311	11-01	467118.517	3336124.167	2.992E-04	35.662	1088.706	6.462	0.762	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000072	L312	4-78	467138.023	3336110.036	3.141E-03	26.518	449.817	20.117	0.914	
1251	0520-00001-V20	EQT00000000070	L313	4-01	467141.575	3336106.368	1.260E-03	42.977	310.928	24.262	0.610	-
1251	0520-00001-V20	EQT00000000121	L314	1-06	467129.000	3336120.000	8.975E-05	15.240	1088.706	3.901	1.524	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000100	L315	6-01	467198.235	3336054.117	1.260E-03	14.021	310.928	13.990	0.253	-
1251	0520-00001-V20	EQT00000000025	L316	10-01	467142.562	3336114.122	8.975E-04	44.501	1088.706	3.231	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000044	L317	2-91	467132.010	3336128.005	3.314E-01	26.518	347.039	25.268	0.914	-
1251	0520-00001-V20	EQT00000000010	L318	1-01	467146.420	3336116.327	1.260E-03	28.042	310.928	13.990	0.253	-
1251	0520-00001-V20	EQT00000000194	L319	2-21	467146.420	3336116.327	1.260E-04	9.144	310.928	9.449	1.000	-
1251	0520-00001-V20	EQT00000000088	L320	5-01	467141.628	3336124.098	1.260E-03	38.100	338.706	3.658	0.405	-
1251	0520-00001-V20	EQT00000000039	L321	2-01	467147.390	3336118.540	1.260E-03	27.737	310.928	9.327	0.253	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3439	0520-00048-V7	FUG00000000001	L322	1-87	467845.178	3335300.230	1.348E-03	1.000	298.150	0.001	1.000	Per review of the emission calculations found in February 2022 Title V Renewal and Minor Modification Application (EDMS Document ID: 13147240), this source operates intermittently; therefore, the emissions were normalized.
3439	0520-00048-V7	FUG00000000021	L323	1-14	467845.178	3335300.230	1.050E-04	1.000	298.150	0.001	1.000	
3439	0520-00048-V7	FUG00000000022	L324	2-14	467845.178	3335300.230	4.893E-03	1.000	298.150	0.001	1.000	
3439	0520-00048-V7	FUG00000000024	L325	1-16	467845.178	3335300.230	1.628E-03	1.000	298.150	0.001	1.000	
1251	0520-00001-V20	EQT00000000062	L326	3-87	467053.354	3336230.743	2.520E-03	29.870	320.372	28.468	0.152	-
1251	0520-00001-V20	EQT00000000031	L327	12-81	467056.253	3336234.058	1.260E-03	29.870	299.261	29.931	0.168	-
1251	0520-00001-V20	EQT00000000154	L328	5-12	467342.025	3335929.911	3.654E-02	6.401	308.150	17.983	0.183	-
1251	0520-00001-V20	EQT00000000122	L329	2-06	467209.980	3336084.998	1.795E-04	22.860	1088.706	7.132	1.524	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000064	L330	3-91	467055.346	3336252.899	1.260E-03	32.309	302.594	12.863	0.152	-
1251	0520-00001-V20	EQT00000000107	L331	7-87	467130.239	3336179.538	5.984E-05	14.326	337.594	19.812	0.213	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000024	L332	1-99	467182.083	3336127.301	1.260E-03	22.860	308.150	20.726	0.241	-
1251	0520-00001-V20	EQT00000000018	L333	1-89	467168.648	3336142.855	1.260E-03	10.668	302.594	20.635	0.171	-
1251	0520-00001-V20	EQT00000000102	L334	6-87	467134.090	3336179.527	5.984E-05	14.326	337.594	19.812	0.213	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000110	L335	8-87	467130.255	3336185.079	5.984E-05	14.326	337.594	19.812	0.213	
1251	0520-00001-V20	EQT00000000105	L336	7-73	467186.895	3336126.179	8.681E-01	60.655	560.928	11.918	1.524	-
1251	0520-00001-V20	EQT00000000048	L337	2-97	467118.739	3336198.411	2.520E-03	7.010	319.817	3.993	0.405	-
1251	0520-00001-V20	EQT00000000089	L338	5-87	467137.942	3336179.515	5.984E-05	14.326	337.594	19.812	0.213	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000116	L339	9-87	467134.107	3336185.067	5.984E-05	14.326	337.594	19.812	0.213	
1251	0520-00001-V20	EQT00000000098	L340	55-90	467148.512	3336171.727	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000101	L341	6-83	467147.555	3336173.946	1.260E-03	30.480	302.594	17.983	0.183	-
1251	0520-00001-V20	EQT00000000074	L342	4-87	467137.959	3336185.056	5.984E-05	14.326	337.594	19.812	0.213	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1251	0520-00001-V20	EQT00000000097	L343	54-90	467148.522	3336175.051	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000094	L344	51-90	467154.290	3336171.710	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000096	L345	53-90	467148.532	3336178.376	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000085	L346	47-90	467155.253	3336171.707	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000084	L347	46-90	467154.300	3336175.034	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000093	L348	50-90	467154.300	3336175.034	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000095	L349	52-90	467148.542	3336181.700	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000083	L350	45-90	467154.309	3336178.358	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000087	L351	49-90	467154.309	3336178.358	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000081	L352	43-90	467161.030	3336171.689	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000078	L353	40-90	467154.319	3336181.683	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000082	L354	44-90	467154.319	3336181.683	1.260E-03	31.394	388.706	10.759	0.366	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1251	0520-00001-V20	EQT00000000086	L355	48-90	467154.319	3336181.683	1.260E-03	30.785	349.817	11.247	0.366	-
1251	0520-00001-V20	EQT00000000068	L356	38-90	467162.960	3336172.792	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000080	L357	42-90	467161.040	3336175.014	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000067	L358	37-90	467164.886	3336172.786	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000079	L359	41-90	467161.050	3336178.338	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000069	L360	39-90	467162.976	3336178.332	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000021	L361	1-93	467208.000	3336130.999	3.830E-01	26.518	347.039	27.737	0.914	-
1251	0520-00001-V20	EQT00000000066	L362	36-90	467164.902	3336178.327	1.260E-03	31.394	388.706	10.759	0.366	-
1251	0520-00001-V20	EQT00000000034	L363	13-81	467112.105	3336233.891	1.260E-03	24.384	299.261	17.374	0.219	-
1251	0520-00001-V20	EQT00000000099	L364	56-90	467160.127	3336191.638	1.260E-03	13.411	294.261	26.426	0.213	-
1251	0520-00001-V20	EQT00000000023	L365	1-97	467176.461	3336179.400	1.260E-03	21.641	308.150	11.491	0.229	-
1251	0520-00001-V20	EQT00000000109	L366	7-93	467183.205	3336180.488	6.300E-03	2.438	299.817	4.145	0.305	-
1251	0520-00001-V20	EQT00000000053	L367	26-90	467191.865	3336178.246	1.134E-02	10.363	299.817	9.540	0.274	-
1251	0520-00001-V20	EQT00000000106	L368	7-83	467192.858	3336188.216	3.780E-02	9.449	326.483	18.471	0.213	-
1251	0520-00001-V20	EQT00000000046	L369	2-94	467154.518	3336248.170	1.978E-01	19.812	327.594	10.058	0.914	-
1251	0520-00001-V20	EQT00000000015	L370	1-79	467113.240	3336291.510	3.654E-02	24.384	308.150	17.983	0.183	-
1251	0520-00001-V20	EQT00000000192	L371	1-19	467268.800	3336143.443	1.159E-01	12.192	435.928	16.459	1.524	-
1251	0520-00001-V20	EQT00000000193	L372	1-21	467268.800	3336143.443	1.071E-01	30.480	427.039	14.051	1.067	-
1251	0520-00001-V20	FUG00000000005	L379	F2	467179.688	3336292.419	1.260E-03	12.192	298.706	0.001	1.000	-
1251	0520-00001-V20	EQT00000000045	L381	2-93	467207.637	3336300.093	1.930E-03	24.384	422.039	24.750	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000017	L382	H-103	469128.782	3333568.542	2.772E-02	4.572	497.039	13.411	0.610	-
3585	0520-00050-V18	EQT00000000070	L383	P-049	469077.835	3333673.846	8.630E-05	1.524	699.817	0.001	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000012	L384	CT-100	469065.607	3333709.451	1.260E-03	9.144	297.594	0.001	1.000	-
3585	0520-00050-V18	EQT00000000072	L385	C-55	469135.905	3333566.971	1.151E-04	1.524	699.817	0.001	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000020	L386	H-205	469128.841	3333589.596	1.260E-02	26.975	560.928	6.309	0.610	-
3585	0520-00050-V18	EQT00000000021	L387	H-501	469128.841	3333589.596	2.596E-01	53.340	533.150	7.620	2.438	-
3585	0520-00050-V18	EQT00000000051	L388	H-701	469128.841	3333589.596	1.777E-01	30.480	667.594	3.048	1.524	-
3585	0520-00050-V18	EQT00000000071	L389	P-050	469050.046	3333758.917	8.630E-05	1.524	699.817	0.001	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000018	L390	H-201	469126.961	3333606.223	6.300E-02	20.117	389.817	5.480	1.585	-
3585	0520-00050-V18	EQT00000000019	L391	H-204	469127.054	3333639.467	1.235E-01	41.758	527.594	3.200	1.585	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
3585	0520-00050-V18	EQT00000000007	L392	32-G-3201	469155.810	3333589.520	1.784E-03	6.096	533.150	2.353	0.305	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000008	L393	50-G-5001	469155.810	3333589.520	3.236E-03	6.096	533.150	65.038	0.305	
3585	0520-00050-V18	EQT00000000009	L394	50-G-5002	469155.810	3333589.520	3.236E-03	6.096	533.150	65.038	0.305	
1251	0520-00001-V20	EQT00000000155	L396	1-14	467411.738	3336186.789	2.301E-04	2.387	748.150	102.718	0.128	
1251	0520-00001-V20	EQT00000000156	L397	2-14	467411.738	3336186.789	6.041E-04	3.048	808.150	140.818	0.128	
1251	0520-00001-V20	EQT00000000157	L398	3-14	467411.738	3336186.789	1.007E-04	2.134	834.261	46.634	0.088	
1251	0520-00001-V20	EQT00000000158	L399	4-14	467411.738	3336186.789	1.151E-04	2.286	727.594	61.570	0.140	
1251	0520-00001-V20	EQT00000000159	L400	5-14	467411.738	3336186.789	1.438E-05	1.036	755.372	20.726	0.064	
1251	0520-00001-V20	EQT00000000160	L401	6-14	467411.738	3336186.789	6.041E-04	2.438	808.150	140.818	0.128	
1251	0520-00001-V20	EQT00000000161	L402	7-14	467411.738	3336186.789	5.610E-04	2.652	727.594	175.870	0.152	
1251	0520-00001-V20	EQT00000000162	L403	8-14	467411.738	3336186.789	1.309E-03	2.377	727.594	79.858	0.116	
1251	0520-00001-V20	EQT00000000163	L404	9-14	467411.738	3336186.789	5.610E-04	2.438	744.261	106.070	0.128	
1251	0520-00001-V20	EQT00000000164	L405	10-14	467411.738	3336186.789	4.027E-04	2.134	755.372	165.506	0.088	
1251	0520-00001-V20	EQT00000000170	L406	16-14	467411.738	3336186.789	1.438E-05	0.305	807.594	2025.701	0.024	
1251	0520-00001-V20	EQT00000000171	L407	17-14	467411.738	3336186.789	1.438E-05	0.305	807.594	2025.701	0.024	
1251	0520-00001-V20	EQT00000000172	L408	18-14	467411.738	3336186.789	9.781E-04	1.920	749.817	199.644	0.128	
27518	2461-V7	EQT00000000037	L409	20-96A	465100.045	3338104.753	1.764E-02	6.096	299.817	14.356	1.000	-
27518	2461-V7	EQT00000000038	L410	20-96B	465100.045	3338104.753	1.764E-02	6.096	299.817	14.356	1.000	-
3585	0520-00050-V18	EQT00000000015	L411	F-400	469141.953	3333800.102	1.016E+00	30.480	1255.372	20.000	5.770	LDEQ flare default stack velocity was utilized. The stack diameter was calculated based on permitted heat input of 1,082 MMBTU/hr.
27518	2461-V7	EQT00000000016	L412	18-96	465181.112	3338103.941	1.890E-02	4.572	310.928	17.739	0.533	-
27518	2461-V7	FQT00000000017	L413	19-96	465181.112	3338103.941	4.032E-02	4.572	310.928	17.739	0.533	-
27518	2461-V7	EQT00000000011	L415	13-96	465298.031	3338053.927	7.560E-03	4.572	310.928	14.082	0.457	-
27518	2461-V7	EQT00000000045	L416	02-18	465298.031	3338053.927	1.260E-03	10.668	299.817	29.697	0.101	-
27518	2461-V7	EQT00000000010	L417	12-96	465299.090	3338053.923	7.560E-03	4.572	310.928	23.226	0.457	-
27518	2461-V7	EQT00000000044	L418	01-18	465299.090	3338053.923	1.260E-03	10.668	299.817	29.697	0.101	-
27518	2461-V7	EQT00000000007	L419	09-96	465259.148	3338088.845	1.260E-03	32.004	322.039	14.874	0.152	-
27518	2461-V7	EQT00000000008	L420	10-96	465259.148	3338088.845	1.260E-03	10.668	299.817	13.655	0.101	-
27518	2461-V7	EQT00000000013	L423	15-96	465310.968	3338064.967	6.300E-04	18.288	333.150	11.643	0.305	-
27518	2461-V7	EQT00000000012	L424	14-96	465310.971	3338065.964	1.260E-03	18.288	333.150	11.643	0.305	-
27518	2461-V7	EQT00000000015	L425	17-96	465313.869	3338069.058	5.040E-04	4.572	310.928	15.514	0.204	-
27518	2461-V7	EQT00000000014	L426	16-96	465314.931	3338069.941	5.040E-04	4.572	310.928	15.514	0.204	-
27518	2461-V7	EQT00000000004	L429	03-96	465258.995	3338131.952	1.260E-04	32.004	322.039	14.874	0.152	-
27518	2461-V7	EQT00000000005	L430	04-96	465258.995	3338131.952	3.780E-04	10.668	298.150	13.655	0.101	-
27518	2461-V7	EQT00000000003	L431	02-96	465676.120	3337928.073	3.780E-03	38.100	1144.261	4.322	0.558	-
3585	0520-00050-V18	EQT00000000059	L432	P-174	469269.800	3333899.670	1.424E-03	2.591	699.817	0.001	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
27518	2461-V7	EQT00000000002	L433	01-96	465676.068	3338003.869	1.260E-03	30.480	1144.261	11.046	0.357	-
27518	2461-V7	EQT00000000006	L434	08-96	465357.188	3338219.073	1.777E-01	13.716	310.928	8.250	8.534	The stack velocity is calculated based on the permitted flow rate and stack diameter.
3585	0520-00050-V18	CON00000000003	L435	MVCU	469552.928	3333725.155	3.780E-02	15.240	810.928	10.668	2.591	-
3585	0520-00050-V18	EQT00000000058	L436	EMERG	469552.928	3333725.155	3.596E-04	1.524	699.817	0.001	0.076	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3585	0520-00050-V18	EQT00000000060	L437	P-402	469552.928	3333725.155	1.151E-04	1.524	699.817	0.001	0.076	
3585	0520-00050-V18	EQT00000000061	L438	Bz-ThOx	469552.928	3333725.155	2.520E-03	7.620	1088.706	11.162	0.305	-
3585	0520-00050-V18	EQT00000000063	L439	H-501A	469552.928	3333725.155	1.021E-01	52.426	627.594	10.506	1.777	-
3585	0520-00050-V18	EQT00000000064	L440	H-901	469552.928	3333725.155	4.788E-02	48.463	610.928	9.367	1.372	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
18070	0520-00146-V6	EQT00000000016	L441	20-90	465514.240	3338331.700	2.019E-04	4.572	755.372	0.396	0.134	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
18070	0520-00146-V6	EQT00000000007	L445	4-90	465495.240	3338430.600	5.684E-04	3.048	855.372	75.590	0.101	
18070	0520-00146-V6	EQT00000000006	L446	1-97	465635.880	3338356.100	7.434E-02	22.860	438.706	6.340	1.676	-
18070	0520-00146-V6	EQT00000000005	L447	3-90	465644.870	3338359.000	6.804E-02	22.860	429.261	16.642	1.448	-
18070	0520-00146-V6	EQT00000000017	L448	25-90	465639.690	3338412.600	1.222E-01	15.011	310.928	0.001	1.000	-
6164	0520-00145-V16	EQT00000000043	L449	WPT6-96	465210.285	3338680.964	1.777E-01	30.480	441.483	19.873	1.402	-
6164	0520-00145-V16	EQT00000000044	L450	WPT7-96	465210.302	3338686.505	1.777E-01	30.480	441.483	19.873	1.402	-
18070	0520-00146-V6	EQT00000000004	L451	2-90	465594.400	3338454.300	9.954E-02	39.014	435.928	3.932	1.905	-
18070	0520-00146-V6	EQT00000000003	L452	1-90	465590.200	3338459.000	4.284E-02	41.148	430.372	4.450	1.219	-
6164	0520-00145-V16	EQT00000000042	L453	WPT5-96	465204.557	3338696.496	1.310E-01	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000015	L454	EGN-2	470532.799	3331575.285	9.261E-03	7.001	848.150	49.122	0.600	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emissions and stack parameters were obtained from option 2.
188813	0520-00476-V1	EQT00000000014	L455	EGN-1	470532.533	3331584.151	9.261E-03	7.001	848.150	49.122	0.600	
188813	0520-00476-V1	EQT00000000001	L456	F-101	470570.964	3331437.222	2.545E+00	65.000	441.500	37.230	3.500	
6164	0520-00145-V16	EQT00000000040	L457	WPT3-96	465204.687	3338737.497	1.310E-01	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000046	L458	CT2	470543.205	3331647.839	1.159E-01	22.000	310.928	8.501	6.721	-
188813	0520-00476-V1	EQT00000000047	L459	CT3	470543.205	3331647.839	7.686E-02	22.000	310.928	8.501	6.721	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	EQT00000000009	L460	F-341A	470573.430	3331566.533	8.918E-01	65.000	571.500	12.210	3.500	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emissions and stack parameters were obtained from option 2.
18070	0520-00146-V6	EQT00000000015	L461	17-90	465528.190	3338566.200	1.260E-03	60.655	1273.000	20.000	0.610	LDEQ flare default stack velocity and stack temperature were utilized.
6164	0520-00145-V16	EQT00000000038	L462	WPT1-96	465203.855	3338778.501	1.310E-01	43.282	474.817	11.278	2.134	-
188813	0520-00476-V1	EQT00000000010	L463	F-341B	470597.514	3331566.469	6.161E-01	55.001	571.483	37.402	1.999	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	EQT00000000036	L464	F-103	470614.294	3331536.837	6.665E-01	64.999	433.150	5.483	3.840	
188813	0520-00476-V1	EQT00000000048	L465	F-343B	470629.222	3331607.273	8.230E-03	64.999	404.817	23.037	2.499	
188813	0520-00476-V1	EQT00000000017	L466	FPE-2	470617.087	3331680.885	1.298E-03	3.499	848.150	27.508	0.299	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emissions and stack parameters were obtained from option 2.

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
185639	0520-00481-V0	EQT00000000023	L467	P-0803A	470844.700	3330600.300	2.589E-04	6.096	725.928	28.926	0.305	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
185639	0520-00481-V0	EQT00000000024	L468	P-0803B	470846.460	3330600.829	2.589E-04	6.096	725.928	28.926	0.305	
188813	0520-00476-V1	EQT00000000016	L469	FPE-1	470632.404	3331680.844	1.298E-03	3.499	848.150	27.508	0.299	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emissions and stack parameters were obtained from option 2.
188813	0520-00476-V1	EQT00000000035	L470	F-102	470689.787	3331523.449	1.457E+00	64.999	441.483	37.234	3.499	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	EQT00000000037	L471	F-342	470682.102	3331567.794	8.921E-01	64.999	571.483	12.213	3.499	
188813	0520-00476-V1	EQT00000000038	L472	F-343A	470677.643	3331593.625	8.442E-02	55.001	405.372	23.037	2.499	
6164	0520-00145-V16	EQT00000000041	L473	WPT4-96	465184.017	3338898.242	1.310E-01	43.282	474.817	11.278	2.134	
6164	0520-00145-V16	EQT00000000029	L474	9-89	465533.922	3338728.701	4.188E-04	4.572	755.372	3.048	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
188813	0520-00476-V1	EQT00000000033	L475	CT1	470709.687	3331652.381	6.174E-02	15.600	310.928	8.501	9.860	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
6164	0520-00145-V16	EQT00000000039	L476	WPT2-96	465204.361	3338938.070	1.310E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000037	L477	9-01	465694.562	3338683.872	3.276E-02	13.716	929.817	36.576	2.438	-
6164	0520-00145-V16	EQT00000000026	L478	6-89	465601.380	3338749.544	1.877E-01	17.678	313.706	7.590	9.754	-
6164	0520-00145-V16	EQT00000000047	L480	WPT10-96	465410.294	3338908.608	9.723E-04	4.572	755.372	0.305	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000054	L481	WPT38-96	465417.984	3338966.095	2.416E-04	6.096	333.150	0.001	0.305	
6164	0520-00145-V16	EQT00000000105	L482	WPT1-10	465417.984	3338966.095	1.285E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000110	L483	1-13	465417.984	3338966.095	1.147E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000111	L484	WPT1-13	465417.984	3338966.095	1.625E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000112	L485	WPT1-14	465417.984	3338966.095	5.034E-03	1.000	0.000	0.001	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000116	L486	WPT1-16	465417.984	3338966.095	4.662E-02	17.678	313.706	7.882	9.144	-
6164	0520-00145-V16	EQT00000000117	L487	1-18	465417.984	3338966.095	5.799E-04	12.192	0.000	0.001	2.286	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000118	L488	7-18	465417.984	3338966.095	2.301E-04	3.048	0.000	0.001	7.620	
6164	0520-00145-V16	EQT00000000129	L489	3-20	465417.984	3338966.095	2.520E-02	1.000	0.000	0.001	1.000	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
6164	0520-00145-V16	EQT00000000130	L490	WPT1-19	465417.984	3338966.095	2.301E-04	1.000	0.000	0.001	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000131	L491	4-20	465417.984	3338966.095	2.520E-02	1.000	0.000	0.001	1.000	-
6164	Regper - Boiler	EQT00000000133	L492	WPT1-21	465417.984	3338966.095	5.418E-02	1.000	0.000	0.001	1.000	-
682	0520-00119-V7	ARE00000000002	L493	AREA2	467327.010	3337582.949	1.386E-01	1.000	0.000	0.001	1.000	-
682	0520-00119-V7	EQT00000000019	L494	Eng-1	467327.010	3337582.949	3.596E-04	1.000	0.000	0.001	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000045	L495	WPT8-96	465415.348	3338985.053	2.444E-01	17.678	313.706	7.590	9.754	-
6164	0520-00145-V16	EQT00000000017	L496	31-85	465761.362	3338802.234	1.978E-01	30.480	477.594	18.288	1.402	-
6164	0520-00145-V16	EQT00000000036	L497	1-95	465739.343	3338842.195	1.310E-01	43.282	474.817	11.278	2.134	-
6164	0520-00145-V16	EQT00000000023	L498	1-89F	465766.324	3338849.868	1.512E-01	43.586	388.706	14.630	1.524	-
188813	0520-00476-V1	EQT00000000012	L499	F-461	470921.531	3331725.065	1.260E-03	64.999	1273.150	1.859	0.213	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
188813	0520-00476-V1	EQT00000000039	L500	F-462	470921.531	3331725.065	9.954E-04	64.999	1273.150	1.859	0.213	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emissions and stack parameters were obtained from option 2.
188813	0520-00476-V1	EQT00000000040	L501	F-463	470921.531	3331725.065	1.260E-03	64.999	1273.150	1.859	0.213	Per November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was performed to evaluate three operating scenarios (options) in which option 2 resulted in a worst-case impact for $PM_{2.5}$ 24-hr. Therefore the emission sources from option 1 and 3 were excluded.
6164	0520-00145-V16	EQT00000000028	L502	8-89	465567.500	3338997.872	6.208E-04	4.572	755.372	0.914	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
6164	0520-00145-V16	EQT00000000025	L503	4-89	465757.939	3338939.653	1.386E-01	67.562	644.261	46.848	1.219	-
185639	0520-00481-V0	EQT00000000028	L504	RH-1001	471258.590	3330498.990	6.300E-03	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000001	L505	GT-1301A	471264.700	3330518.580	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000002	L506	GT-1301B	471264.220	3330550.640	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000013	L507	H-1603	471280.050	3330449.269	1.084E-01	54.864	422.039	20.361	1.219	-
6164	0520-00145-V16	EQT00000000024	L508	2-89	465761.974	3338998.371	1.386E-01	30.480	422.039	18.288	1.402	-
185639	0520-00481-V0	EQT00000000025	L509	P-0801A	471324.170	3330356.499	1.151E-04	6.096	838.150	29.688	0.204	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
185639	0520-00481-V0	EQT00000000026	L510	P-0801B	471326.130	3330356.570	1.151E-04	6.096	838.150	29.688	0.204	
185639	0520-00481-V0	EQT00000000009	L511	B-1101	471296.120	3330589.510	8.820E-03	15.240	394.261	9.653	0.914	-
6164	0520-00145-V16	EQT00000000022	L512	1-89E	465766.912	3339038.249	1.512E-01	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000021	L513	1-89D	465766.974	3339058.195	1.512E-01	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000020	L514	1-89C	465767.005	3339068.168	1.512E-01	43.586	388.706	14.630	1.524	-
6164	0520-00145-V16	EQT00000000019	L515	1-89B	465767.036	3339078.141	1.512E-01	43.586	388.706	14.630	1.524	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
6164	0520-00145-V16	EQT00000000018	L516	1-89A	465767.071	3339089.222	1.512E-01	43.586	388.706	14.630	1.524	-
185639	0520-00481-V0	EQT00000000029	L517	RH-2001	471358.290	3330500.380	6.300E-03	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000003	L518	GT-2301A	471364.640	3330520.200	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000004	L519	GT-2301B	471364.080	3330552.169	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000014	L520	H-2603	471379.500	3330450.970	1.084E-01	54.864	422.039	20.361	1.219	-
185639	0520-00481-V0	EQT00000000010	L521	B-2101	471396.280	3330591.590	8.820E-03	15.240	394.261	9.653	0.914	-
133	0520-00011-V7	FUG00000000011	L522	6-01	471350.123	3331055.969	1.260E-02	1.000	0.000	0.001	1.000	-
185639	0520-00481-V0	EQT00000000030	L523	RH-3001	471458.250	3330502.190	6.300E-03	24.994	422.039	20.361	0.366	-
133	0520-00011-V7	FUG00000000012	L524	6-02	471375.169	3331054.795	7.686E-02	1.000	0.000	0.001	1.000	-
185639	0520-00481-V0	EQT00000000006	L525	GT-3301B	471463.800	3330553.800	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000015	L526	H-3603	471479.580	3330452.459	1.084E-01	54.864	422.039	20.361	1.219	-
133	0520-00011-V7	SCN00000000001	L527	Kiln AOS	471407.965	3330995.980	1.434E+00	53.035	1366.483	19.812	4.267	It is an alternate operating scenario of EQT00000000018. The emissions from EQT00000000018 are modeled under Model ID: L561. Therefore, this source was excluded.
133	0520-00011-V7	SCN00000000002	L528	Bake Furnace AOS	471407.965	3330995.980	5.292E-01	38.252	337.039	9.754	2.438	It is an alternate operating scenario of EQT00000000051. The emissions from EQT00000000051 are modeled under Model ID: L572. Therefore, this source was excluded.
133	0520-00011-V7	EQT00000000009	L529	1-01	471407.798	3331005.954	2.898E-02	21.336	302.594	22.860	0.457	-
185639	0520-00481-V0	EQT00000000021	L530	A-0721	471465.740	3330723.130	2.882E-02	32.918	1273.000	20.000	0.457	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled. LDEQ flare default stack velocity and stack temperature were utilized.
185639	0520-00481-V0	EQT00000000022	L531	A-0722	471466.530	3330722.240	1.549E-02	32.918	1273.000	20.000	0.610	
133	0520-00011-V7	EQT00000000017	L532	1-09	471407.117	3331114.551	4.158E-02	32.004	302.594	17.556	0.457	-
185639	0520-00481-V0	EQT00000000011	L533	B-3101	471495.730	3330592.980	8.820E-03	15.240	394.261	9.653	0.914	-
185639	0520-00481-V0	EQT00000000031	L534	RH-4001	471557.950	3330503.660	6.300E-03	24.994	422.039	20.361	0.366	-
185639	0520-00481-V0	EQT00000000007	L535	GT-4301A	471564.220	3330523.460	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000008	L536	GT-4301B	471563.650	3330555.340	4.536E-02	64.922	458.150	26.021	2.743	-
185639	0520-00481-V0	EQT00000000016	L537	H-4603	471579.470	3330454.200	1.084E-01	54.864	422.039	20.361	1.219	-
133	0520-00011-V7	FUG00000000001	L538	1-10	471456.532	3331223.018	2.268E-02	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000088	L539	6-16	471438.000	3331348.000	4.603E-03	2.591	885.372	23.284	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
188813	0520-00476-V1	FUG00000000004	L540	PVRD	471119.443	3332619.680	1.260E-03	1.000	0.000	0.001	1.000	-
188813	0520-00476-V1	SCN00000000001	L541	F-101	471119.443	3332619.680	2.092E-02	1.000	0.000	0.001	1.000	Based on the November 2018 modeling report (PSD and Title V Renewal application (pg: 531/593)), the modeling analysis was evaluated for three operating scenarios (options) in which option 2 was the worst-case for $PM_{2.5}$ 24-hr. Therefore the option 1 and 3 emission sources were excluded.
188813	0520-00476-V1	SCN00000000002	L542	F-341A	471119.443	3332619.680	5.064E-03	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000003	L543	F-341B	471119.443	3332619.680	5.064E-03	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000004	L544	F-461	471119.443	3332619.680	2.309E-02	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000005	L545	F-461	471119.443	3332619.680	3.038E-04	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000006	L546	F-102	471119.443	3332619.680	1.197E-02	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000007	L547	F-342	471119.443	3332619.680	7.332E-03	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000008	L548	F-462	471119.443	3332619.680	7.720E-02	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000009	L549	F-462	471119.443	3332619.680	2.624E-04	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000010	L550	F-103	471119.443	3332619.680	5.478E-03	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000011	L551	F-343A	471119.443	3332619.680	6.939E-04	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000012	L552	F-463	471119.443	3332619.680	5.239E-02	1.000	0.000	0.001	1.000	
188813	0520-00476-V1	SCN00000000013	L553	F-463	471119.443	3332619.680	6.131E-03	1.000	0.000	0.001	1.000	
133	0520-00011-V7	EQT00000000010	L554	1-02	471515.750	3331024.512	6.300E-03	10.668	302.594	28.865	0.853	-
133	0520-00011-V7	EQT00000000012	L555	1-04	471511.039	3331065.524	4.158E-02	18.288	302.594	15.453	0.558	-
133	0520-00011-V7	FUG00000000005	L556	2-04	471459.756	3331351.551	3.780E-03	1.000	0.000	0.001	1.000	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

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133	0520-00011-V7	EQT00000000086	L557	6-14	471449.000	3331406.000	1.295E-03	10.769	888.150	45.406	0.052	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
133	0520-00011-V7	FUG00000000004	L558	2-03	471447.448	3331434.691	6.678E-02	1.000	0.000	0.001	1.000	-
185639	0520-00481-V0	EQT00000000012	L559	B-4101	471596.120	3330594.370	8.820E-03	15.240	394.261	9.653	0.914	-
133	0520-00011-V7	EQT00000000087	L560	6-15	471393.000	3331700.000	3.812E-03	3.048	873.150	59.506	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
133	0520-00011-V7	EQT00000000018	L561	2-02	471452.319	3331455.733	2.912E+00	53.035	1366.483	19.812	4.267	-
133	0520-00011-V7	FUG00000000003	L562	2-01	471484.867	3331375.864	1.008E-02	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000011	L563	1-03	471534.316	3331125.302	3.528E-02	12.192	302.594	15.453	0.558	-
133	0520-00011-V7	EQT00000000021	L564	3-05	471526.978	3331268.268	5.040E-03	18.288	302.594	26.060	0.335	-
133	0520-00011-V7	FUG00000000006	L565	3-01	471552.752	3331176.228	1.260E-03	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000019	L566	3-03	471544.248	3331240.520	8.820E-03	10.973	302.594	24.079	0.671	-
133	0520-00011-V7	FUG00000000007	L567	3-02	471554.730	3331196.168	1.260E-03	4.572	302.594	15.240	0.762	-
133	0520-00011-V7	EQT00000000057	L568	5-10	471522.480	3331391.280	1.260E-03	5.060	302.594	14.387	0.549	-
133	0520-00011-V7	FUG00000000002	L569	1-11	471579.616	3331132.942	2.520E-03	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000024	L570	3-08	471556.806	3331253.785	1.512E-02	15.240	302.594	15.728	0.732	-
133	0520-00011-V7	EQT00000000063	L571	3-13	471561.606	3331247.124	8.820E-03	4.572	302.594	15.240	0.762	-
133	0520-00011-V7	EQT00000000051	L572	5-01	471522.749	3331495.442	2.815E+00	38.252	337.039	9.754	2.438	-
133	0520-00011-V7	EQT00000000061	L573	3-12	471580.822	3331227.128	1.260E-04	10.668	302.594	25.878	0.152	-
133	0520-00011-V7	EQT00000000027	L574	3-11	471580.831	3331230.453	2.520E-03	0.610	338.706	29.688	0.101	-
133	0520-00011-V7	EQT00000000022	L575	3-07	471582.821	3331254.826	2.520E-02	9.144	366.483	20.117	1.372	-
133	0520-00011-V7	EQT00000000091	L576	2-09	471582.821	3331254.826	6.300E-03	9.144	366.483	20.117	1.372	-
133	0520-00011-V7	EQT00000000094	L577	6-18	471582.821	3331254.826	6.300E-03	9.144	366.483	20.117	1.372	-
185639	0520-00481-V0	EQT00000000027	L578	EG-0001	471713.200	3330448.860	4.315E-04	6.096	749.817	29.352	0.405	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
133	0520-00011-V7	FUG00000000017	L579	1-08A	471609.000	3331156.999	2.520E-04	23.470	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000055	L580	5-08	471553.443	3331443.281	7.106E-01	12.192	302.594	18.044	0.387	-
133	0520-00011-V7	EQT00000000013	L581	1-05	471613.355	3331140.611	5.292E-02	4.572	302.594	11.400	0.357	-
133	0520-00011-V7	EQT00000000016	L582	1-08	471609.559	3331162.783	1.260E-03	23.470	310.928	8.900	0.101	-
133	0520-00011-V7	EQT00000000056	L583	5-09	471555.364	3331441.060	7.106E-01	12.192	302.594	18.044	0.387	-
133	0520-00011-V7	EQT00000000054	L584	5-04	471551.559	3331459.908	1.512E-02	2.530	338.706	24.780	0.122	-
1250	2920-V4	EQT00000000242	L585	3(XXX)2	468162.045	3337666.043	2.999E-01	64.618	477.594	12.427	2.210	-
133	0520-00011-V7	FUG00000000016	L586	1-07A	471610.000	3331192.000	5.040E-04	23.470	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000015	L587	1-07	471609.656	3331200.459	1.260E-03	23.470	310.928	8.900	0.101	-
133	0520-00011-V7	EQT00000000090	L588	5-01b	471527.000	3331603.000	2.815E+00	38.252	311.483	16.764	2.134	-
133	0520-00011-V7	FUG00000000015	L589	1-06A	471611.000	3331225.000	1.260E-03	23.470	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000014	L590	1-06	471609.744	3331234.810	1.260E-03	23.470	310.928	8.900	0.101	-
133	0520-00011-V7	EQT00000000025	L591	3-09	471611.746	3331263.616	6.300E-03	9.144	302.594	14.082	0.457	-
133	0520-00011-V7	FUG00000000010	L592	5-13	471571.827	3331474.261	2.079E-01	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000026	L593	3-10	471614.679	3331280.230	1.260E-04	9.144	338.706	11.369	0.204	-
133	0520-00011-V7	EQT00000000052	L594	5-02	471587.355	3331518.546	1.260E-04	0.610	338.706	25.878	0.152	-
185639	0520-00481-V0	EQT00000000005	L595	GT-3301A	471764.510	3330521.910	4.536E-02	64.922	458.150	26.021	2.743	-
133	0520-00011-V7	EQT00000000030	L596	4-02	471674.044	3331138.239	1.386E-02	27.432	394.261	23.439	0.792	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

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37119	2338-V4	EQT00000000011	L597	PG-1-94	466839.934	3338867.958	1.260E-04	10.668	1273.000	20.000	0.152	LDEQ flare default stack velocity and stack temperature were utilized.
37119	2338-V4	EQT00000000012	L598	PG-6-94	466839.934	3338867.958	8.199E-04	2.438	659.261	0.001	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
37119	2338-V4	EQT00000000013	L599	PG-7-94	466839.934	3338867.958	8.199E-04	2.438	659.261	0.001	0.101	
133	0520-00011-V7	EQT00000000053	L600	5-03	471600.843	3331518.511	1.260E-04	12.192	310.928	25.878	0.152	-
133	0520-00011-V7	EQT00000000050	L601	4-24	471661.107	3331352.138	1.260E-02	9.144	588.706	10.363	0.457	-
133	0520-00011-V7	EQT00000000092	L602	4-22	471661.107	3331352.138	3.780E-03	9.144	588.706	10.363	0.457	-
133	0520-00011-V7	EQT00000000093	L603	4-23	471661.107	3331352.138	3.780E-03	9.144	588.706	10.363	0.457	-
133	0520-00011-V7	EQT00000000033	L604	4-05	471681.273	3331326.600	1.260E-04	27.432	310.928	28.743	0.457	-
133	0520-00011-V7	EQT00000000036	L605	4-08	471688.948	3331314.391	1.260E-04	18.288	310.928	20.452	0.152	-
133	0520-00011-V7	EQT00000000037	L606	4-09	471689.912	3331314.388	1.260E-04	18.288	310.928	20.452	0.152	-
133	0520-00011-V7	FUG00000000009	L607	4-29	471689.957	3331332.118	1.260E-04	1.000	0.000	0.001	1.000	-
133	0520-00011-V7	EQT00000000038	L608	4-10	471697.647	3331325.449	1.260E-03	27.432	310.928	13.198	0.579	-
133	0520-00011-V7	EQT00000000035	L609	4-07	471700.546	3331328.766	1.260E-03	27.432	310.928	15.392	0.366	-
133	0520-00011-V7	EQT00000000034	L610	4-06	471705.363	3331328.754	1.260E-03	27.432	310.928	15.392	0.366	-
133	0520-00011-V7	EQT00000000029	L611	4-01	471700.652	3331369.766	3.780E-03	27.432	310.928	15.758	0.549	-
133	0520-00011-V7	EQT00000000031	L612	4-03	471700.652	3331369.766	1.260E-03	27.432	310.928	17.922	0.579	-
133	0520-00011-V7	EQT00000000032	L613	4-04	471700.652	3331369.766	1.260E-03	27.432	310.928	17.922	0.579	-
133	0520-00011-V7	EQT00000000039	L614	4-11	471711.206	3331353.117	2.470E-01	18.288	310.928	22.555	1.219	-
1250	3010-V6	EQT00000000352	L615	3(XXIX)3	466425.104	3339281.999	9.402E+01	91.440	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
1250	2796-V14	EQT00000000417	L616	3(IX)37-250	468433.000	3337642.000	7.434E-02	1.000	0.000	0.001	1.000	-
212290	0520-00509-V0	EQT00000000010	L617	3101B	471816.759	3331339.438	8.051E-01	60.960	1273.150	20.117	0.113	-
1250	2935-V11	EQT00000000315	L618	3(XX-K)1-4	468317.989	3337920.018	3.452E-05	6.096	298.150	0.018	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1250	2935-V11	EQT00000000312	L619	3(XX-K)1-1	468381.011	3337871.965	3.452E-05	6.096	298.150	0.018	0.152	
1250	2935-V11	EQT00000000313	L620	3(XX-K)1-2	468289.035	3337962.986	3.452E-05	6.096	298.150	0.018	0.152	
1250	2935-V11	EQT00000000314	L621	3(XX-K)1-3	468302.033	3337962.949	3.452E-05	6.096	298.150	0.018	0.152	
1250	2935-V11	EQT00000000536	L622	S5A	468199.894	3338067.963	1.270E-03	1.000	0.000	0.001	1.000	
1250	2796-V14	EQT00000000418	L623	3(IX)37-PTU	468649.000	3337676.999	5.922E-02	1.000	0.000	0.001	1.000	-
1250	2796-V14	EQT00000000066	L624	3(IX)38	468512.000	3337851.999	6.174E-02	15.240	1273.150	20.001	1.430	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	3010-V6	EQT00000000341	L625	3(MISC)CT12	468295.921	3338079.985	8.685E-04	10.058	298.150	12.009	9.144	Updated the stack temperature based on other permitted cooling towers. Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	3010-V6	EQT00000000341	L626	3(MISC)CT12	468295.921	3338079.985	3.843E-01	12.192	298.150		30.480	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L625. Therefore, this source was excluded from this modeling analysis.
1250	3010-V6	EQT00000000340	L627	3(MISC)CT7	468264.792	3338136.146	1.589E-03	10.058	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	3010-V6	EQT00000000340	L628	3(MISC)CT7	468264.792	3338136.146	7.031E-01	12.192	298.150		30.480	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L627. Therefore, this source was excluded from this modeling analysis.
212290	0520-00509-V0	EQT00000000031	L629	C702JB	471824.844	3332126.179	3.226E-01	64.999	688.706	18.136	3.706	-
3351	0520-00098-V9	EQT00000000020	L630	E-21	472030.000	3331228.000	3.780E-03	6.096	394.261	6.096	0.396	-
212290	0520-00509-V0	EQT00000000030	L631	C702JA	471823.859	3332155.436	3.226E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000025	L632	C701JB	471824.873	3332213.055	3.200E-01	64.999	466.483	28.834	3.048	-
212290	0520-00509-V0	EQT00000000024	L633	C701JA	471826.001	3332239.537	3.200E-01	64.999	466.483	28.834	3.048	-
3351	0520-00098-V9	EQT00000000042	L634	VSH-1	472000.000	3331537.000	2.520E-03	10.058	422.039	13.801	0.253	-
3351	0520-00098-V9	EQT00000000013	L635	E-14	472046.000	3331333.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000014	L636	E-15	472046.000	3331333.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000015	L637	E-16	472046.000	3331333.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000016	L638	E-17	472046.000	3331336.000	8.946E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000017	L639	E-18	472046.000	3331339.000	8.946E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000018	L640	E-19	472046.000	3331341.999	8.946E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000019	L641	E-20	472046.000	3331345.000	8.946E-02	13.106	288.706	8.230	0.762	-
1250	3010-V6	EQT00000000538	L642	PCD	466995.531	3339257.773	1.121E-01	1.000	0.000	0.001	1.000	Based on the Title V Permit Modification submitted to LDEQ on July 18, 2019. The portable thermal oxidizer/vapor combustor (PTO/VC) is only used during turnaround or other maintenance activities. The PTO/VC will be brought onsite on an as-needed basis. Therefore, this source was excluded.
1250	3010-V6	EQT00000000539	L643	PF	466995.531	3339257.773	9.408E+01	1.000	0.000	0.001	1.000	Based on the Title V Permit Modification submitted to LDEQ on July 18, 2019. The portable flare is only used during turnaround or other maintenance activities when one or more flares are down. Therefore, this source was excluded.

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	2935-V11	EQT00000000293	L645	3(XX-B)1	468356.000	3338155.000	7.560E-02	45.720	922.039	21.196	1.753	-
1250	2935-V11	EQT00000000316	L646	3(XX-K)2-1	468306.963	3338202.955	1.058E-01	1.000	0.000	0.001	1.000	-
1250	2935-V11	EQT00000000317	L647	3(XX-K)2-2	468306.963	3338202.955	1.058E-01	1.000	0.000	0.001	1.000	-
1250	2920-V4	EQT00000000241	L648	3(XXVIII)1	468233.045	3338277.968	2.873E-01	45.720	435.928	9.616	2.438	-
1250	2935-V11	EQT00000000296	L649	3(VIII-A)1	468366.000	3338158.000	4.322E-01	76.200	355.372	6.337	1.509	-
1250	2935-V11	EQT00000000295	L650	3(VIII-A)2	468374.000	3338165.000	2.142E-02	9.144	477.594	5.066	0.762	-
3351	0520-00098-V9	EQT00000000004	L651	E-3	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000005	L652	E-4	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000006	L653	E-5	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000007	L654	E-6	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000008	L655	E-7	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000009	L656	E-8	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000010	L657	E-9	472200.000	3330900.000	8.820E-02	13.106	288.706	8.230	0.762	-
3351	0520-00098-V9	EQT00000000011	L658	E-10	472200.000	3330900.000	3.780E-03	6.096	394.261	6.096	0.396	-
3351	0520-00098-V9	EQT00000000012	L659	E-11	472200.000	3330900.000	3.780E-03	6.096	394.261	6.096	0.396	-
3351	0520-00098-V9	EQT00000000023	L660	E-1	472200.000	3330900.000	2.718E-03	15.240	741.483	18.288	2.896	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3351	0520-00098-V9	EQT00000000024	L661	E-22	472200.000	3330900.000	1.688E-01	51.816	450.928	6.096	2.438	-
3351	0520-00098-V9	EQT00000000025	L662	E-23	472200.000	3330900.000	1.688E-01	51.816	450.928	6.096	2.438	-
3351	0520-00098-V9	EQT00000000026	L663	EG-1	472200.000	3330900.000	1.812E-03	3.048	422.039	0.001	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
3351	0520-00098-V9	EQT00000000027	L664	EG-2	472200.000	3330900.000	6.473E-04	3.048	422.039	0.001	0.152	
3351	0520-00098-V9	EQT00000000028	L665	SEG	472200.000	3330900.000	3.164E-04	2.438	422.039	0.001	0.152	
3351	0520-00098-V9	EQT00000000088	L666	FL-1	472200.043	3330899.982	5.753E-07	18.288	1477.594	0.001	0.457	
3351	0520-00098-V9	EQT00000000030	L667	FWP-1	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000031	L668	FWP-2	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000032	L669	FWP-3	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000033	L670	FWP-4	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000034	L671	FWP-5	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000035	L672	FWP-6	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000036	L673	FWP-7	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000037	L674	FWP-8	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000038	L675	FWP-9	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000039	L676	FWP-10	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
3351	0520-00098-V9	EQT00000000040	L677	FWP-11	472200.428	3330899.760	7.192E-05	7.925	728.150	58.988	0.152	
212290	0520-00509-V0	EQT00000000011	L678	4102JA	471993.660	3331991.334	2.877E-05	15.240	810.928	30.949	0.305	
212290	0520-00509-V0	EQT00000000012	L679	4102JB	472011.875	3331994.279	2.877E-05	15.240	810.928	30.949	0.305	
212290	0520-00509-V0	EQT00000000029	L680	B702JB	471987.553	3332127.647	3.226E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000028	L681	B702JA	471986.571	3332158.123	3.226E-01	64.999	688.706	18.136	3.706	-
1250	3009-V6	EQT00000000501	L682	GA1016A/B	467201.065	3339256.602	2.402E-03	1.000	0.000	0.001	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
212290	0520-00509-V0	EQT00000000013	L683	4102JC	472031.612	3331989.686	2.877E-05	15.240	810.928	30.949	0.305	
1250	2935-V11	EQT00000000294	L684	3(VIII-A)3	468398.000	3338250.999	2.394E-02	9.144	588.706	10.775	0.610	-
212290	0520-00509-V0	EQT00000000023	L689	B701JB	471987.581	3332214.413	3.200E-01	64.999	466.483	28.834	3.048	-
212290	0520-00509-V0	EQT00000000022	L690	B701JA	471989.482	3332241.889	3.200E-01	64.999	466.483	28.834	3.048	-
1250	2930-V7	EQT00000000240	L691	3(XXVI)2	468189.967	3338562.993	2.444E-01	48.768	422.039	7.437	2.286	-
1250	3010-V6	EQT00000000357	L692	3(MISC)GEN	468399.959	3338400.045	1.424E-01	3.048	298.150	0.091	0.091	-
1250	3010-V6	EQT00000000357	L693	3(MISC)GEN	468399.959	3338400.045	1.424E-01	3.658	800.928		0.101	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L692. Therefore, this source was excluded from this modeling analysis.
1250	3010-V6	EQT00000000412	L694	3(MISC)GEN EMERG	468399.959	3338400.045	4.410E-02	3.658	800.928	0.001	0.101	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	3010-V6	EQT00000000549	L695	432-JG827	468399.959	3338400.045	7.048E-04	3.658	800.928	0.001	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1250	2930-V7	EQT00000000239	L696	3(XXVI)1	468189.990	3338637.016	2.444E-01	45.720	422.039	7.437	2.286	-
212290	0520-00509-V0	EQT00000000027	L697	A702JB	472154.003	3332122.571	3.226E-01	64.999	688.706	18.136	3.706	-
1250	2930-V7	EQT00000000540	L698	RNTL-BLR-1	468519.970	3338349.945	7.182E-02	10.973	516.483	12.192	1.219	-
1250	2930-V7	EQT00000000541	L699	RNTL-BLR-2	468519.970	3338349.945	7.182E-02	10.973	516.483	12.192	1.219	-
212290	0520-00509-V0	EQT00000000026	L700	A702JA	472154.078	3332152.157	3.226E-01	64.999	688.706	18.136	3.706	-
212290	0520-00509-V0	EQT00000000009	L701	7106B	472079.454	3332469.046	5.708E-01	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000021	L702	A701JB	472154.999	3332211.550	3.200E-01	64.999	466.483	28.834	3.048	-
1250	2920-V4	EQT00000000237	L703	3(XXII)1	468507.957	3338390.980	2.331E-01	60.960	433.150	13.274	2.134	-
1250	3010-V6	EQT00000000338	L704	3(MISC)CT11	468328.886	3338560.042	2.728E-03	10.058	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
212290	0520-00509-V0	EQT00000000020	L705	A701JA	472155.068	3332238.699	3.200E-01	64.999	466.483	28.834	3.048	-
1250	3010-V6	EQT00000000342	L706	3(MISC)3XCT	468362.101	3338559.946	7.409E-01	6.096	298.150		6.096	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L707. Therefore, this source was excluded from this modeling analysis.
1250	3010-V6	EQT00000000342	L707	3(MISC)3XCT	468362.101	3338559.946	1.674E-03	10.058	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	2920-V4	EQT00000000238	L708	3(XXII)2	468499.987	3338432.004	8.215E-01	76.200	416.483	12.713	4.014	-
1250	2920-V4	RLP00000000017	L709	3(XXII)3	468485.020	3338449.999	1.096E-01	41.148	699.817	15.993	0.204	-
1250	2935-V11	EQT00000000525	L710	B101	468615.811	3338365.295	7.560E-03	15.240	1255.372	0.001	1.219	-
1250	2796-V14	EQT00000000534	L711	B-103	469126.956	3337852.998	3.667E-01	15.240	1088.706	0.001	2.743	-
1250	2796-V14	EQT00000000517	L712	3(IX)39	469141.021	3337855.951	6.930E-02	3.810	298.150	0.229	0.457	-
1250	2796-V14	EQT00000000063	L713	3(IX)34	469141.000	3337856.000	7.308E-02	22.860	1273.150	20.001	1.606	-
1250	2920-V4	EQT00000000230	L714	3(XVIII-A)3	468520.018	3338500.983	7.938E-02	29.962	695.372	6.971	1.728	-
1250	3010-V6	EQT00000000351	L715	3(XXIII)2	468163.099	3338825.919	9.403E+01	67.056	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
1250	2920-V4	EQT00000000232	L716	3(XVIII-A)2	468520.041	3338508.961	8.064E-02	29.962	672.039	6.907	1.728	-
1250	3010-V6	EQT00000000334	L717	3(MISC)CT1&2	468151.888	3338844.125	3.722E-03	10.058	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	2920-V4	EQT00000000234	L718	3(XVIII)2	468512.983	3338532.031	7.812E-02	27.889	658.706	9.104	1.295	-
1250	2920-V4	EQT00000000227	L722	3(X-A)1	468443.027	3338612.017	3.276E-02	19.202	816.483	7.687	1.067	-
1250	2920-V4	EQT00000000236	L723	3(XXVII-A)1	468489.983	3338568.997	1.890E-02	30.480	588.706	9.050	0.686	-
1250	2920-V4	EQT00000000228	L724	3(X-A)2	468442.957	3338620.993	4.788E-02	19.202	744.261	10.510	1.067	-
1250	2920-V4	EQT00000000231	L725	3(XVIII-A)4	468620.031	3338494.048	3.881E-01	52.852	616.483	6.203	4.191	-
1250	2920-V4	EQT00000000229	L726	3(XVIII-A)1	468619.997	3338515.989	8.568E-02	30.876	692.594	7.501	1.728	-
1250	2920-V4	EQT00000000225	L727	3(X)4	468517.047	3338639.951	1.071E-01	32.309	624.817	8.099	1.676	-
1250	2796-V14	EQT00000000518	L728	3(IX)51-T101	469142.287	3338032.029	1.260E-03	1.000	0.000	0.001	1.000	-
1250	2920-V4	EQT00000000233	L729	3(XVIII)1	468624.042	3338549.997	7.308E-02	27.889	741.483	7.239	1.448	-
1250	2920-V4	EQT00000000235	L731	3(XVIII)3	468623.980	3338561.965	8.316E-02	28.164	644.261	11.019	1.015	-
1250	3010-V6	EQT00000000336	L732	3(MISC)CT4	468360.906	3338813.046	2.244E-03	10.058	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
212290	0520-00509-V0	EQT00000000005	L733	7105B	472322.141	3332482.062	1.109E-01	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000007	L734	7102B	472322.145	3332483.614	3.780E-04	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000008	L735	7103B	472322.148	3332484.833	3.780E-04	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000006	L736	7101B	472323.490	3332482.059	3.780E-04	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000004	L737	7104B	472324.834	3332480.504	3.780E-04	106.070	1273.150	20.117	0.113	-
212290	0520-00509-V0	EQT00000000016	L738	6101LC	472380.013	3332281.459	9.637E-04	15.240	655.372	23.716	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1244	0520-00007-V9	EQT00000000054	L739	B-100	467950.838	3339196.763	1.764E-01	15.240	422.039	28.392	1.372	-
1244	0520-00007-V9	EQT00000000055	L740	PE-07	467950.838	3339196.763	1.050E-03	7.315	739.261	19.873	0.241	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1244	0520-00007-V9	EQT00000000056	L741	PE-08	467950.838	3339196.763	1.453E-03	7.315	739.261	19.873	0.241	
1244	0520-00007-V9	EQT00000000057	L742	PE-09	467950.838	3339196.763	1.007E-03	7.315	739.261	19.873	0.241	
1244	0520-00007-V9	EQT00000000058	L743	PE-10	467950.838	3339196.763	8.820E-03	1.713	858.150	39.377	0.101	-
1244	0520-00007-V9	EQT00000000059	L744	PE-11	467950.838	3339196.763	6.041E-04	1.881	777.039	75.194	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1244	0520-00007-V9	EQT00000000064	L745	RTO	467950.838	3339196.763	9.702E-02	19.507	463.706	498.653	3.658	-
1244	0520-00007-V9	EQT00000000065	L746	96-01f	467950.838	3339196.763	2.520E-04	1.000	0.000	0.001	1.000	-
1244	Regper-Eng	EQT00000000066	L747	Eng	467950.838	3339196.763	1.726E-03	1.000	0.000	0.001	1.000	-
1244	0520-00007-V9	EQT00000000067	L748	PE-12	467950.838	3339196.763	1.812E-03	4.572	760.372	33.165	0.241	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
212290	0520-00509-V0	EQT00000000014	L749	6101LA	472381.394	3332294.420	9.637E-04	15.240	655.372	23.716	0.914	
1250	2920-V4	EQT00000000226	L750	3(X)5	468617.012	3338616.948	7.560E-02	25.908	544.261	5.172	1.728	-
1250	2930-V7	EQT00000000396	L751	3(XXXIII)1A	469041.019	3338209.947	1.764E-01	53.340	505.372	2.195	2.109	-
212290	0520-00509-V0	EQT00000000015	L752	6101LB	472411.353	3332294.345	9.637E-04	15.240	655.372	23.716	0.914	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1250	2920-V4	EQT00000000224	L753	3(X)6	468632.992	3338650.035	2.167E-01	28.346	477.594	13.378	1.881	-
212290	0520-00509-V0	EQT00000000018	L754	6301C	472392.371	3332407.642	1.121E-01	45.720	560.928	6.096	2.134	-
1250	2920-V4	EQT00000000223	L755	3(X)1	468622.029	3338687.965	3.654E-02	24.384	644.261	9.284	0.914	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	3010-V6	EQT00000000335	L756	3(MISC)CT3	468913.055	3338410.990	2.139E-03	15.240	298.150	12.009	9.144	Based on the current permit calculations (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions were conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	3010-V6	EQT00000000350	L757	3(XXII)4	468405.069	3338904.007	9.402E+01	65.532	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
212290	0520-00509-V0	EQT00000000002	L758	B201B	472433.730	3332382.606	6.174E-02	30.480	1088.706	13.411	1.737	-
212290	0520-00509-V0	EQT00000000001	L759	A201B	472438.366	3332387.248	6.174E-02	30.480	1088.706	13.411	1.737	-
212290	0520-00509-V0	EQT00000000003	L760	C201B	472448.188	3332385.672	6.174E-02	30.480	1088.706	13.411	1.737	-
1250	3009-V6	EQT00000000502	L761	GA112A/B	467481.496	3339676.857	2.772E-02	1.000	0.000	0.001	1.000	-
212290	0520-00509-V0	SCN00000000001	L762	7106B	472751.818	3331023.597	1.050E+01	106.070	1273.150	20.117	16.871	-
3351	0520-00098-V9	EQT00000000089	L763	GEN-1	472751.818	3331023.597	1.870E-04	1.576	866.483	53.203	0.064	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1250	3010-V6	EQT00000000521	L764	343B105	468675.890	3338804.164	2.034E+00	67.056	1273.150	20.117	3.505	EQT521 is a part of GRP0138. Based on the SR 172 in 3010-V6 permit, only one flare must operate at any given time. It will be a violation of this permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, the annual emissions (70.72 tpy) were modeled.
1250	3010-V6	EQT00000000522	L765	343B107	468683.977	3338804.141	9.408E+01	91.440	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
1250	3010-V6	EQT00000000343	L766	3(IV)1	469139.021	3338377.109	9.402E+01	64.313	1273.150	20.117	3.505	
1244	0520-00007-V9	EQT00000000015	L767	96-05b	467891.470	3339503.224	1.483E-03	13.716	295.372	6.553	12.253	Based on EDMS Document ID: 12013806 Pg: 161/295, the PM hourly emission is 2.29 lb/hr. Based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.514% (1000 ppm) was applied to the hourly emissions.
1250	2796-V14	EQT00000000064	L768	3(IX)35	469216.000	3338344.000	1.562E-01	30.480	1273.150	20.001	2.737	-
1244	0520-00007-V9	EQT00000000014	L769	96-05a	467879.440	3339603.324	1.302E-03	13.716	295.372	12.466	9.662	Based on EDMS Document ID: 12013806 Pg: 161/295, the PM hourly emission is 2.01 lb/hr. Based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.514% (1000 ppm) was applied to the hourly emissions.
1250	2930-V7	EQT00000000397	L770	3(XXXIII)1B	469416.991	3338210.001	1.764E-01	53.340	505.372	2.347	2.109	-
3766	0520-00057-V5AA	EQT00000000007	L771	LR-01VCU	468471.530	3339149.821	1.021E-01	13.716	1271.483	18.440	2.438	-
1250	2930-V7	EQT00000000398	L772	3(XXXIII)2A	469453.005	3338212.006	2.646E-01	48.768	422.039	7.437	2.286	-
1250	2930-V7	EQT00000000399	L773	3(IIIXXX)2B	469453.968	3338212.003	2.646E-01	53.340	505.372	5.730	2.539	-
1250	2930-V7	EQT00000000256	L774	3(VII-C)2	469085.034	3338591.019	2.381E-01	36.576	727.594	3.353	2.134	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1250	2930-V7	EQT00000000252	L775	3(III)1	469114.990	3338562.012	1.499E-01	47.244	672.039	2.926	2.134	-
1250	2930-V7	EQT00000000255	L776	3(VII-C)1	469114.990	3338562.012	2.003E-01	30.480	810.928	2.896	2.438	-
1250	2930-V7	EQT00000000260	L777	3(III)4	469114.990	3338562.012	1.046E-01	19.812	298.150	0.098	0.457	Based on EDMS Document ID: 12290501 (Pg 133/172), maximum hourly emission is based on all the emissions for a cycle occur in 1 hour (which is overly conservative). Therefore, the average hourly emissions were modeled for this source.
1250	2930-V7	EQT00000000253	L778	3(III)2	469114.993	3338563.010	1.499E-01	46.482	627.594	2.926	2.134	-
1250	2908-V10	EQT00000000034	L779	3(XVI)4	468595.894	3339076.106	3.402E-02	27.432	637.594	3.767	1.448	-
1250	2908-V10	EQT00000000033	L780	3(XVI)3	468594.852	3339081.982	2.394E-02	33.757	555.928	3.770	1.219	-
1250	2930-V7	EQT00000000257	L781	3(XIII)1	469088.028	3338663.039	2.003E-01	60.960	435.928	6.767	1.676	-
1250	2930-V7	EQT00000000251	L782	3(I-D)3	469087.972	3338677.001	2.192E-01	60.960	644.261	6.523	1.676	-
1250	2930-V7	EQT00000000249	L783	3(I-D)1	469070.996	3338699.987	1.877E-01	30.480	810.928	5.944	1.676	-
1250	2930-V7	EQT00000000268	L784	3(K-6)5	469249.017	3338531.051	5.027E-01	28.194	477.594	4.724	2.896	-
1250	2930-V7	RLP00000000018	L785	3(XXVI)5	469225.980	3338556.049	5.292E-02	3.048	373.150	0.001	0.152	Based on EDMS Document ID: 12290501 (Pg 133/172), maximum hourly emission is based on all the emissions for a cycle occur in 1 hour (which is overly conservative). Therefore, the average hourly emissions were modeled for this source.
1250	2930-V7	EQT00000000266	L786	3(K-6)3	469209.972	3338581.027	9.853E-01	38.100	494.261	24.140	2.362	-
1250	2930-V7	EQT00000000516	L787	B1E	469209.972	3338581.027	5.166E-01	19.812	422.039	16.947	2.134	-
1250	2930-V7	EQT00000000250	L788	3(I-D)2	469088.042	3338702.045	8.190E-02	21.336	688.706	2.134	1.829	-
1250	2930-V7	RLP00000000019	L789	3(XXVI)7	469226.033	3338574.998	1.890E+00	3.048	373.150	0.001	0.152	Based on the Permit No. 2930-V7 (pg 61/66), 1250RLP00000000018 and 1250RLP00000000019 shall not vent routine emissions at the same time. Therefore, excluded this source from the modeling analysis.
1250	2930-V7	EQT00000000267	L790	3(K-6)4	469249.007	3338561.968	5.443E-01	28.194	477.594	4.724	2.896	-
1250	2930-V7	EQT00000000265	L791	3(K-6)2	469235.955	3338576.965	1.449E+00	22.647	513.706	13.076	2.438	-
1250	2908-V10	EQT00000000028	L792	3(II)7	468721.059	3339080.070	1.726E-01	34.747	655.372	11.342	2.134	-
1250	2930-V7	EQT00000000264	L793	3(K-6)1	469261.975	3338585.978	1.244E+00	24.536	463.706	12.405	2.743	-
1244	0520-00007-V9	EQT00000000052	L794	B-900	468101.317	3339629.604	1.789E-01	15.240	422.039	28.651	1.372	-
1244	0520-00007-V9	EQT00000000009	L795	96-02d	468100.933	3339630.048	8.946E-02	15.240	409.817	0.238	0.762	-
1250	2908-V10	EQT00000000027	L796	3(II)4	468744.077	3339083.108	1.512E-02	16.764	520.372	5.002	0.838	-
1250	2908-V10	EQT00000000038	L797	3(II)16	468735.090	3339104.963	1.495E+01	70.104	342.039	12.424	2.438	EQT00000000038, EQT00000000039, and EQT00000000040 are part of GRP0110 CAP, the GRP0110 average hourly emissions and individual maximum hourly emissions (72+46.67=118.67 lb/hr) were modeled under this source.
1250	2930-V7	EQT00000000272	L798	3(K-6)9	469269.000	3338621.000	6.061E-01	30.480	422.039	14.508	2.362	-
1250	2908-V10	EQT00000000030	L799	3(II)8	468824.070	3339080.110	9.450E-02	34.747	688.150	6.203	2.134	-
1250	2930-V7	EQT00000000271	L800	3(K-6)8	469269.010	3338656.990	6.061E-01	30.480	422.039	14.057	1.917	-
1250	2796-V14	EQT00000000062	L801	3(IX)12	469373.000	3338553.000	6.930E-02	1.000	298.150	0.001	1.000	-
1250	2930-V7	EQT00000000247	L802	3(I)5	469134.986	3338791.006	7.195E-01	30.480	435.928	12.527	2.210	-
1250	2930-V7	EQT00000000248	L803	3(I)6	469118.998	3338822.965	7.636E-01	30.480	435.928	20.086	2.210	-
1250	2908-V10	EQT00000000039	L804	3(II)17	468823.082	3339105.045	5.880E+00	70.104	342.039	12.424	2.438	EQT00000000038, EQT00000000039, and EQT00000000040 are part of GRP0110 CAP, the emissions from these sources were merged and modeled under 1250EQT00000038 (merged stack; refer to Model ID: L797).
1250	2908-V10	EQT00000000029	L805	3(II)5	468836.165	3339101.573	2.142E-02	16.764	555.372	7.373	0.838	

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1244	0520-00007-V9	EQT00000000011	L806	96-03a	468036.481	3339811.305	2.999E-01	46.634	1273.000	20.000	3.167	LDEQ flare default stack temperature and stack velocity were utilized. The stack diameter is calculated based on the permitted heat input.
1250	2908-V10	EQT00000000032	L807	3(II)9	468914.951	3339080.184	1.726E-01	34.747	649.261	11.232	2.134	-
1250	2908-V10	EQT00000000031	L808	3(II)6	468921.984	3339081.937	1.512E-02	16.764	479.817	4.615	0.838	-
1250	2908-V10	EQT00000000040	L809	3(II)18	468912.134	3339105.125	5.880E+00	70.104	342.039	12.424	2.438	EQT00000000038, EQT00000000039, and EQT00000000040 are part of GRP0110 CAP, the emissions from these sources were merged and modeled under 1250EQT00000038 (merged stack; refer to Model ID: L797).
1244	0520-00007-V9	EQT00000000012	L810	96-03b	468016.332	3339867.324	2.999E-01	24.384	1273.000	20.000	3.167	LDEQ flare default stack temperature and stack velocity were utilized. The stack diameter is calculated based on the permitted heat input.
1250	2930-V7	EQT00000000508	L811	B1D	469283.002	3338805.994	5.166E-01	19.812	422.039	16.947	2.134	-
5337	0520-00107-V6	EQT00000000018	L814	018	468430.199	3339641.174	1.260E-04	4.877	1273.150	19.995	0.457	-
5337	0520-00107-V6	EQT00000000010	L815	002	468205.363	3339855.471	2.331E-01	30.480	395.372	15.423	1.676	-
1250	2908-V10	EQT00000000322	L816	3(XXXIV)7-103	468957.905	3339221.903	1.890E-02	54.864	588.706	6.407	1.332	-
5337	0520-00107-V6	EQT00000000009	L817	009	468444.914	3339669.722	1.260E-02	4.572	1273.150	19.995	0.457	-
1250	2908-V10	EQT00000000321	L818	3(XXXIV)7-102	468957.939	3339233.982	3.150E-02	54.864	588.706	8.516	1.408	-
1250	2908-V10	EQT00000000320	L819	3(XXXIV)7-101	468957.979	3339248.055	3.150E-02	54.864	588.706	14.042	1.152	-
1250	2930-V7	EQT00000000254	L820	3(VII)1	469685.027	3338555.990	6.300E-02	35.204	577.594	2.438	1.707	-
1250	3010-V6	EQT00000000353	L821	3(XXXIV)10	468966.929	3339281.052	9.403E+01	60.960	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
5337	0520-00107-V6	EQT00000000007	L822	006	467992.467	3340134.010	4.536E-02	16.764	313.150	9.321	9.449	-
5337	0520-00107-V6	EQT00000000027	L823	FWP-1	468471.467	3339764.169	2.301E-04	6.096	672.039	45.720	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
5337	0520-00107-V6	EQT00000000028	L824	FWP-2	468471.948	3339764.168	2.301E-04	6.096	672.039	45.720	0.152	
5337	0520-00107-V6	EQT00000000029	L825	FWP-3	468472.237	3339764.167	2.301E-04	6.096	672.039	45.720	0.152	
5337	0520-00107-V6	EQT00000000030	L826	FWP-4	468472.525	3339764.166	2.301E-04	6.096	672.039	45.720	0.152	
5337	0520-00107-V6	EQT00000000031	L827	FWP-5	468472.718	3339764.165	2.301E-04	6.096	672.039	45.720	0.152	
5337	0520-00107-V6	EQT00000000032	L828	FWP-6	468473.007	3339764.165	2.301E-04	6.096	672.039	45.720	0.152	
42895	0520-00170-V5	EQT00000000003	L829	3	468801.730	3339484.641	1.764E-01	42.672	1273.000	20.000	0.762	LDEQ flare default stack temperature and stack velocity were utilized.
1250	2908-V10	EQT00000000325	L830	3(XXXIV)7-203	468958.078	3339385.130	1.890E-02	54.864	588.706	6.407	1.332	-
42895	0520-00170-V5	EQT00000000001	L831	1	468820.100	3339512.292	1.089E+00	42.672	402.594	16.459	2.743	-
1250	2908-V10	EQT00000000324	L832	3(XXXIV)7-202	468957.823	3339397.099	3.150E-02	54.864	588.706	8.516	1.408	-
42895	0520-00170-V5	EQT00000000002	L833	2	468812.455	3339532.260	6.841E-04	5.791	0.000	0.001	1.000	Based on Document ID: 10481441 (Pg: 72/129), the $PM_{2.5}$ emissions are assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.196% (11,500 ppm) was applied to the permitted hourly emissions.
1250	2908-V10	EQT00000000323	L834	3(XXXIV)7-201	468957.859	3339410.064	3.150E-02	54.864	588.706	14.042	1.152	-
1250	2908-V10	EQT00000000036	L835	3(XXIX)2	468918.008	3339479.435	1.071E-01	37.795	577.594	4.459	1.829	-
1250	2908-V10	EQT00000000035	L836	3(XXIX)1	468932.930	3339479.614	1.613E-01	37.795	577.594	6.514	2.286	-
5337	0520-00107-V6	EQT00000000044	L842	EGEN1	468201.999	3340122.984	1.726E-04	2.134	699.261	0.003	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
5337	0520-00107-V6	EQT00000000011	L843	003	468206.261	3340165.081	1.247E-01	30.480	395.372	15.423	1.676	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
5337	0520-00107-V6	EQT00000000016	L844	016	468231.961	3340164.674	8.694E-02	33.528	410.928	17.843	1.423	-
5337	0520-00107-V6	EQT00000000041	L845	004A	468206.722	3340224.475	1.134E-02	12.192	449.817	47.183	0.387	-
5337	0520-00107-V6	EQT00000000042	L846	004B	468206.438	3340226.360	1.134E-02	12.192	449.817	47.183	0.387	-
1250	3010-V6	EQT00000000337	L847	3(MISC)CT502	468322.006	3340145.021	1.079E-03	10.058	298.150	12.009	9.144	Based on the current permit calcs (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions are conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
5337	0520-00107-V6	EQT00000000005	L848	005	468152.612	3340287.131	7.560E-03	20.351	435.928	2.926	0.954	-
5337	0520-00107-V6	EQT00000000001	L849	001	468205.468	3340256.836	9.652E-01	86.868	373.150	14.076	3.962	-
5337	0520-00107-V6	EQT00000000035	L850	001SU	468205.468	3340256.836	3.177E-02	64.999	373.150	14.076	3.962	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
5337	0520-00107-V6	EQT00000000045	L851	EGEN2	468615.012	3339936.958	2.877E-06	2.134	699.261	0.003	1.000	
1250	3010-V6	EQT00000000339	L852	3(XXXIII)3	469217.823	3339423.183	4.186E-03	10.058	298.150	12.009	9.144	Based on the current permit calcs (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions are conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	3010-V6	EQT00000000339	L853	3(XXXIII)3	469217.823	3339423.183	1.852E+00	6.096	298.150		6.096	This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L852. Therefore, this source was excluded from this modeling analysis.
5337	0520-00107-V6	EQT00000000015	L854	015	468204.977	3340286.979	1.058E-01	63.703	408.150	11.918	1.372	-
1250	3010-V6	EQT00000000333	L855	3(MISC)CT5&6	469359.819	3339423.007	1.712E-02	10.058	298.150	12.009	9.144	Based on the current permit calcs (Document ID: 12688281 (Pg: 115/143), the $PM_{2.5}$ emissions are conservatively assumed to be same as PM emissions. Therefore, based on New Mexico Environment Department's September 9, 2013 Cooling Towers memo, the % mass of 0.226% (4000 ppm) was applied to the permitted hourly emissions.
1250	3010-V6	EQT00000000354	L856	2(202)25	468163.903	3340496.092	9.402E+01	61.570	1273.150	20.117	3.505	Based on the SR 172 in 3010-V6 permit, only one flare among EQTs 0343, 350-354, 521, 522, and 539 must operate at any given time. It will be a violation of the permit if maximum hourly emissions rates for two or more flares occur at the same time. Therefore, only modeled EQT521 since it has the highest emissions.
5337	0520-00107-V6	EQT00000000008	L857	008	468099.398	3340657.624	1.008E-02	81.077	1273.150	19.995	1.097	-
5337	0520-00107-V6	EQT00000000046	L858	008SU	468080.211	3340679.842	1.008E-02	81.077	1273.150	19.995	1.097	-
1253	0520-00006-V13	EQT00000000360	L859	1-15	468899.936	3340100.039	1.260E-04	29.413	366.483	0.012	0.701	-
1253	0520-00006-V13	EQT00000000361	L860	2-15	468899.936	3340100.039	1.260E-04	29.413	366.483	0.012	0.701	-
9061	0520-00127-V6	EQT00000000007	L861	86	468377.900	3340523.400	7.686E-02	1.000	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000127	L862	MP4-1	468904.760	3340103.682	5.040E-03	38.405	338.706	18.288	0.405	-
1253	0520-00006-V13	EQT00000000128	L863	MP4-2	468904.760	3340103.682	5.040E-03	7.620	310.928	23.473	0.253	-
1253	0520-00006-V13	EQT00000000129	L864	MP4-3	468904.760	3340103.682	2.520E-04	3.658	347.039	16.154	0.101	-
1253	0520-00006-V13	EQT00000000133	L865	MP5-1	468904.760	3340103.682	5.040E-03	38.405	338.706	18.288	0.405	-
1250	2796-V14	EQT00000000007	L866	3(XXX)1	469953.000	3339145.000	8.820E-02	15.240	1088.706	0.001	2.438	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1253	0520-00006-V13	EQT00000000134	L867	MP5-3	468804.835	3340203.698	7.560E-03	5.486	322.039	18.288	0.405	-
1253	0520-00006-V13	EQT00000000137	L868	MP5-6	468804.835	3340203.698	7.560E-03	5.486	322.039	18.288	0.405	-
1253	0520-00006-V13	EQT00000000146	L869	218	468804.835	3340203.698	6.300E-03	24.384	299.817	9.272	1.000	-
1253	0520-00006-V13	EQT00000000147	L870	219	468804.835	3340203.698	6.300E-03	24.384	299.817	7.620	1.000	-
1253	0520-00006-V13	EQT00000000348	L871	223	468804.835	3340203.698	1.260E-03	24.384	297.039	2.316	1.000	-
1253	0520-00006-V13	EQT00000000349	L872	224	468804.835	3340203.698	1.260E-03	24.384	297.039	2.316	1.000	-
1253	0520-00006-V13	EQT00000000350	L873	225	468804.835	3340203.698	1.260E-03	24.384	297.039	2.316	1.000	-
1253	0520-00006-V13	EQT00000000351	L874	226	468804.835	3340203.698	1.260E-03	24.384	297.039	2.316	1.000	-
1253	0520-00006-V13	EQT00000000123	L875	3-99	468873.664	3340170.591	1.260E-04	9.144	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000124	L876	4-99	468873.664	3340170.591	1.260E-04	9.144	0.000	0.001	1.000	-
1253	0520-00006-V13	RLP00000000113	L877	1-18	469085.971	3340050.977	5.040E-03	9.144	622.039	11.500	0.457	-
9061	0520-00127-V6	EQT00000000016	L878	1-94A	468577.000	3340474.500	1.084E-01	15.240	427.594	18.014	0.838	-
9061	0520-00127-V6	EQT00000000017	L879	1-94B	468577.000	3340478.900	1.625E-01	15.240	427.594	18.014	0.838	-
1253	0520-00006-V13	EQT00000000118	L880	1-99	469124.608	3340029.481	5.040E-04	13.106	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000121	L881	2-99	469124.608	3340029.481	5.040E-04	13.106	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000355	L882	ENG1	469304.750	3339903.646	8.630E-05	2.438	366.483	10.647	0.061	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1253	0520-00006-V13	EQT00000000356	L883	ENG2	469304.750	3339903.646	2.589E-04	2.438	366.483	20.187	0.076	
1253	0520-00006-V13	EQT00000000357	L884	ENG3	469304.750	3339903.646	1.453E-03	2.438	533.150	24.975	0.198	
9061	0520-00127-V6	EQT00000000011	L885	201	468488.310	3340579.600	5.759E-04	3.048	855.372	0.001	0.101	
9061	0520-00127-V6	EQT00000000012	L886	202	468526.800	3340572.700	5.759E-04	3.048	855.372	0.001	0.101	
9061	0520-00127-V6	EQT00000000010	L887	200	468595.160	3340521.900	1.122E-03	4.572	755.372	0.001	0.134	
9061	0520-00127-V6	EQT00000000102	L888	1-14	468579.600	3340539.599	1.134E-02	9.144	422.039	15.139	0.680	-
9061	0520-00127-V6	EQT00000000072	L889	KPELLET1	468523.000	3340597.000	1.525E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000061	L890	JPELLET4	468518.600	3340601.800	1.386E-01	3.353	322.039	16.977	0.204	-
1253	0520-00006-V13	EQT00000000120	L891	2-05B	468800.526	3340381.011	1.260E-03	3.048	310.928	16.901	0.253	-
9061	0520-00127-V6	EQT00000000080	L892	KPELLET9	468509.800	3340634.500	1.525E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000100	L893	P1LOAD7	468550.000	3340604.000	1.260E-03	1.000	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000126	L894	1-05B	468804.826	3340403.716	2.520E-03	4.572	322.039	14.420	0.354	-
1253	0520-00006-V13	EQT00000000345	L895	3-05	468804.826	3340403.716	1.134E-02	3.048	310.928	26.545	0.509	-
1253	0520-00006-V13	EQT00000000346	L896	4-05	468804.826	3340403.716	1.134E-02	3.048	310.928	26.545	0.509	-
9061	0520-00127-V6	EQT00000000065	L897	JPELLET8	468506.200	3340640.300	1.386E-01	6.096	322.039	0.001	0.558	-
9061	0520-00127-V6	EQT00000000058	L898	JPELLET1	468516.200	3340634.500	1.386E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000088	L899	P2LOAD1	468543.700	3340617.600	2.268E-02	43.891	322.039	13.838	0.610	-
9061	0520-00127-V6	EQT00000000089	L900	P2LOAD2	468543.700	3340617.600	2.268E-02	34.747	322.039	13.838	0.610	-
9061	0520-00127-V6	EQT00000000090	L901	P2LOAD3	468543.700	3340617.600	1.008E-02	35.357	322.039	17.191	0.405	-
9061	0520-00127-V6	EQT00000000091	L902	P2LOAD4	468543.700	3340617.600	6.300E-03	6.096	298.150	1.372	0.914	-
9061	0520-00127-V6	EQT00000000081	L903	KPELLET10	468522.700	3340634.500	1.525E-01	1.000	0.000	0.001	0.914	-
9061	0520-00127-V6	EQT00000000066	L904	JPELLET9	468506.200	3340647.200	1.386E-01	6.096	322.039	7.559	0.549	-
1253	0520-00006-V13	EQT00000000365	L905	WE-1	468699.985	3340500.089	8.820E-03	2.438	366.483	2.012	0.152	-
1253	0520-00006-V13	EQT00000000366	L906	WE-2	468699.985	3340500.089	1.260E-02	2.438	366.483	2.957	0.152	-
9061	0520-00127-V6	EQT00000000059	L907	JPELLET2	468528.500	3340634.500	1.386E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000060	L908	JPELLET3	468506.300	3340654.200	1.386E-01	6.096	322.039	7.559	0.558	-
9061	0520-00127-V6	EQT00000000075	L909	KPELLET4	468522.600	3340643.800	1.525E-01	5.486	322.039	14.326	0.405	-
9061	0520-00127-V6	EQT00000000082	L910	KPELLET11	468535.100	3340634.500	1.525E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000077	L911	KPELLET6	468522.600	3340647.299	1.525E-01	6.096	322.039	9.144	0.152	-
9061	0520-00127-V6	EQT00000000078	L912	KPELLET7	468522.600	3340647.299	1.525E-01	6.096	322.039	101.194	0.152	-
9061	0520-00127-V6	EQT00000000074	L913	KPELLET3	468506.230	3340661.300	1.525E-01	6.096	322.039	7.559	0.558	-
9061	0520-00127-V6	EQT00000000064	L914	JPELLET7	468529.600	3340643.800	1.386E-01	6.096	322.039	7.559	0.558	-
9061	0520-00127-V6	EQT00000000062	L915	JPELLET5	468522.600	3340654.300	1.386E-01	6.096	322.039	14.326	0.405	-
9061	0520-00127-V6	EQT00000000063	L916	JPELLET6	468522.600	3340654.300	1.386E-01	6.096	322.039	9.144	0.152	-
9061	0520-00127-V6	EQT00000000076	L917	KPELLET5	468506.200	3340668.199	1.525E-01	6.096	322.039	7.559	0.558	-
9061	0520-00127-V6	EQT00000000067	L918	JPELLET10	468522.600	3340657.800	1.386E-01	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000073	L919	KPELLET2	468529.600	3340657.700	1.525E-01	6.096	322.039	7.559	0.558	-
9061	0520-00127-V6	EQT00000000079	L920	KPELLET8	468529.500	3340664.699	1.525E-01	6.096	322.039	7.559	0.558	-
1253	0520-00006-V13	EQT00000000139	L921	211	469104.788	3340203.735	1.260E-04	24.384	299.817	0.006	1.000	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1253	0520-00006-V13	EQT00000000140	L922	212	469104.788	3340203.735	1.260E-04	24.384	299.817	0.152	1.000	-
1253	0520-00006-V13	EQT00000000141	L923	213	469104.788	3340203.735	1.260E-04	24.384	299.817	0.152	1.000	-
1253	0520-00006-V13	EQT00000000142	L924	214	469104.788	3340203.735	1.260E-04	24.384	299.817	0.152	1.000	-
9061	0520-00127-V6	EQT00000000006	L925	55	468373.910	3340795.300	5.796E-02	1.000	0.000	0.001	1.000	-
1253	0520-00006-V13	RLP00000000017	L926	1-03	468804.822	3340503.780	2.520E-03	4.572	299.817	22.860	0.305	-
1253	0520-00006-V13	RLP00000000018	L927	2-03	468804.822	3340503.780	2.520E-03	4.572	299.817	22.860	0.305	-
1253	0520-00006-V13	EQT00000000354	L928	A-7625 CT	469004.854	3340403.481	1.260E-04	4.572	310.928	0.381	9.754	-
9061	0520-00127-V6	EQT00000000052	L931	FPELLET5	468555.300	3340775.900	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000051	L932	FPELLET4	468528.100	3340797.200	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000048	L933	FPELLET1	468555.400	3340784.300	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000049	L934	FPELLET2	468555.400	3340790.200	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000050	L935	FPELLET3	468555.400	3340793.699	5.544E-02	6.096	322.039	1.381	0.914	-
1253	0520-00006-V13	EQT00000000138	L936	Z1	469304.820	3340203.506	8.141E+00	45.720	1273.000	20.000	16.281	LDEQ flare default stack temperature and stack velocity were utilized. The stack diameter is calculated based on the permitted heat input obtained from EDMS Document ID: 12545498 (pg 134/256).
1253	0520-00006-V13	EQT00000000373	L937	ENG6	469010.042	3340467.959	1.079E-03	3.048	635.928	72.390	0.128	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1253	0520-00006-V13	EQT00000000374	L938	ENG7	469010.042	3340467.959	1.726E-04	3.048	864.817	113.904	0.101	
9061	0520-00127-V6	EQT00000000028	L939	APELLET3	468531.800	3340850.300	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000042	L940	BPELLET8	468534.900	3340850.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000041	L941	BPELLET7	468539.100	3340850.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000040	L942	BPELLET6	468541.700	3340850.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000039	L943	BPELLET5	468544.400	3340850.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000099	L944	P1LOAD6	468620.000	3340794.000	2.520E-03	1.000	0.000	0.001	1.000	-
9061	0520-00127-V6	EQT00000000038	L945	BPELLET4	468555.100	3340850.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000083	L946	P1LOAD1	468619.100	3340802.499	6.300E-03	6.096	310.928	6.462	0.914	-
9061	0520-00127-V6	EQT00000000084	L947	P1LOAD2	468619.100	3340802.499	6.300E-03	6.096	298.150	1.372	0.914	-
9061	0520-00127-V6	EQT00000000085	L948	P1LOAD3	468619.100	3340802.499	6.300E-03	6.096	310.928	6.462	0.914	-
9061	0520-00127-V6	EQT00000000086	L949	P1LOAD4	468619.100	3340802.499	3.780E-03	6.096	298.150	1.372	0.914	-
9061	0520-00127-V6	EQT00000000087	L950	P1LOAD5	468619.100	3340802.499	2.520E-03	6.096	298.150	1.372	0.914	-
9061	0520-00127-V6	EQT00000000037	L951	BPELLET3	468555.000	3340854.100	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000036	L952	BPELLET2	468555.000	3340856.900	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000030	L953	APELLET5	468522.500	3340881.799	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000029	L954	APELLET4	468525.200	3340883.800	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000035	L955	BPELLET1	468553.600	3340863.300	8.820E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000026	L956	APELLET1	468553.600	3340865.899	5.544E-02	6.096	322.039	1.381	0.914	-
9061	0520-00127-V6	EQT00000000027	L957	APELLET2	468553.500	3340875.000	5.544E-02	6.096	322.039	1.381	0.914	-
1253	0520-00006-V13	EQT00000000371	L958	2-18	469023.971	3340525.986	1.033E-01	6.401	549.817	8.068	1.000	-
1253	0520-00006-V13	EQT00000000372	L959	1-19	469028.011	3340558.997	1.033E-01	6.401	549.817	8.068	1.000	-
196978	0520-00492-V1	EQT00000000001	L960	001	470244.890	3339464.410	8.933E-01	91.440	0.000	96.622	1.067	-
196978	0520-00492-V1	EQT00000000002	L961	002	470246.400	3339464.439	1.260E-03	91.440	0.000	51.206	0.457	-
1253	0520-00006-V13	EQT00000000325	L962	5-08	468999.804	3340625.786	7.056E-02	12.192	491.483	17.605	0.863	-
1253	0520-00006-V13	EQT00000000322	L963	2-08	469014.820	3340625.744	1.109E-01	12.192	491.483	21.531	1.097	-
1253	0520-00006-V13	EQT00000000321	L964	1-08	469017.804	3340625.735	1.109E-01	12.192	491.483	21.531	1.097	-
1253	0520-00006-V13	EQT00000000324	L965	4-08	469019.921	3340625.729	7.056E-02	12.192	491.483	17.605	0.863	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1253	0520-00006-V13	SCN00000000001	L966	MSS-BET	469019.921	3340625.729	1.411E-01	6.401	549.817	8.068	1.676	The MSS scenario include emissions from two firetube boilers (100 hrs/yr each), two victory boilers (200 hrs/yr each), two engines (75 hrs/yr each), and a turbine (15 hrs/yr) which operates for a smaller duration (intermittently). Therefore, modeled average hourly emissions. Conservatively assumed Victory Boiler stack parameters based on EDMS Document ID: 12545498 (pgs: 199-203).
1253	0520-00006-V13	EQT00000000370	L967	1-16	469041.868	3340625.667	1.789E-01	12.192	449.817	27.914	1.817	-
1253	0520-00006-V13	EQT00000000014	L968	5-91	469154.769	3340553.653	1.260E-03	12.802	0.000	0.001	1.000	-
1253	0520-00006-V13	RLP00000000005	L969	2-91	469104.855	3340603.660	1.260E-03	35.052	322.039	0.853	0.914	-
1253	0520-00006-V13	RLP00000000009	L970	2-94	469104.855	3340603.660	1.260E-03	35.052	322.039	0.853	0.914	-
1253	0520-00006-V13	RLP00000000010	L971	3-94	469104.855	3340603.660	1.260E-03	35.052	322.039	0.853	0.914	-
1253	0520-00006-V13	RLP00000000011	L972	4-94	469104.855	3340603.660	1.260E-03	35.052	322.039	0.853	0.914	-
196978	0520-00492-V1	EQT00000000017	L974	008B	470326.820	3339523.490	2.877E-05	2.743	699.817	57.912	0.204	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
196978	0520-00492-V1	EQT00000000016	L975	008A	470326.940	3339527.800	2.877E-05	2.743	699.817	57.912	0.204	
196978	0520-00492-V1	EQT00000000018	L976	008C	470327.040	3339528.700	2.877E-05	2.743	699.817	57.912	0.204	
196978	0520-00492-V1	EQT00000000039	L977	019	470299.900	3339560.920	1.512E-01	14.630	313.150	15.240	15.850	-
1253	0520-00006-V13	RLP00000000013	L979	6-94	469204.868	3340603.600	1.260E-03	6.096	299.817	0.509	1.000	-
1253	0520-00006-V13	RLP00000000014	L980	7-94	469204.868	3340603.600	1.260E-03	6.096	299.817	0.509	1.000	-
1253	0520-00006-V13	RLP00000000004	L995	1-91	469104.848	3340703.613	2.520E-03	15.240	299.817	4.042	0.610	-
1253	0520-00006-V13	RLP00000000008	L996	1-94	469104.848	3340703.613	2.520E-03	15.240	322.039	4.042	0.610	-
1253	0520-00006-V13	EQT00000000016	L997	4-03	469250.691	3340639.264	1.260E-04	4.572	0.000	0.001	1.000	-
1253	0520-00006-V13	EQT00000000362	L998	3-15	469300.058	3340600.009	5.620E-01	13.411	324.817	13.920	0.509	-
1253	0520-00006-V13	EQT00000000012	L999	1-05	469304.881	3340603.652	8.820E-03	3.658	299.817	25.908	1.000	-
1253	0520-00006-V13	EQT00000000013	L1000	2-05	469304.881	3340603.652	8.820E-03	3.658	299.817	25.908	1.000	-
1253	0520-00006-V13	RLP00000000006	L1001	3-91	469304.881	3340603.652	1.260E-03	20.117	322.039	2.835	0.305	-
1253	0520-00006-V13	RLP00000000007	L1002	4-91	469304.881	3340603.652	1.260E-03	6.096	322.039	0.488	0.305	-
1253	0520-00006-V13	EQT00000000019	L1003	Z2	469604.846	3340403.685	8.703E+00	45.720	1273.000	20.000	16.834	LDEQ flare default stack temperature and stack velocity were utilized. The stack diameter is calculated based on the permitted heat input obtained from EDMS Document ID: 12545498 (pg 135/256).
1253	0520-00006-V13	EQT00000000015	L1004	3-03	469538.506	3340501.717	1.260E-04	4.572	0.000	0.001	1.000	-
196978	0520-00492-V1	EQT00000000040	L1005	020	470286.000	3339811.590	5.418E-02	13.411	315.372	15.240	15.850	-
196978	0520-00492-V1	EQT00000000043	L1006	005	470409.720	3339694.060	1.638E-02	60.960	372.039	11.430	3.658	-
196978	0520-00492-V1	EQT00000000027	L1008	012	470548.130	3339596.229	1.814E-01	14.630	315.372	15.240	15.850	-
196978	0520-00492-V1	EQT00000000025	L1010	011A	470537.360	3339762.540	6.779E-01	60.960	353.150	20.147	2.134	-
196978	0520-00492-V1	EQT00000000026	L1011	011B	470602.580	3339763.489	6.779E-01	60.960	353.150	20.147	2.134	-
196978	0520-00492-V1	EQT00000000044	L1012	023	470578.420	3339791.309	1.945E-04	6.706	745.372	38.100	0.610	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
196978	0520-00492-V1	EQT00000000012	L1013	006D	470567.480	3339892.820	6.300E-03	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000011	L1014	006C	470567.170	3339912.630	6.300E-03	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000010	L1015	006B	470566.910	3339932.439	6.300E-03	45.720	522.039	126.187	0.610	-
196978	0520-00492-V1	EQT00000000009	L1016	006A	470566.620	3339952.250	6.300E-03	45.720	522.039	126.187	0.610	-
11496	0520-00142-V14	EQT00000000084	L1017	12-01	470025.000	3340481.000	5.040E-03	1.554	933.150	111.423	0.049	-
196978	0520-00492-V1	EQT00000000021	L1018	009C	470639.540	3339927.590	2.520E-03	60.960	308.150	18.898	0.204	-
196978	0520-00492-V1	EQT00000000020	L1019	009B	470639.490	3339939.170	2.520E-03	60.960	308.150	18.898	0.204	-
196978	0520-00492-V1	EQT00000000019	L1020	009A	470639.360	3339950.750	2.520E-03	60.960	308.150	18.898	0.204	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
11496	0520-00142-V14	EQT00000000102	L1021	18-06	470285.441	3340416.558	1.134E-03					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L1022. Therefore, this source was excluded from this modeling analysis.
11496	0520-00142-V14	EQT00000000102	L1022	18-06	470285.441	3340416.558	1.260E-03	2.374	933.150	134.828	0.070	-
11496	0520-00142-V14	EQT00000000103	L1023	17-03	470285.441	3340416.558	1.134E-02	1.701	933.150	82.269	0.070	-
11496	Regper-ENG	EQT00000000104	L1024	18-03	470285.441	3340416.558	1.260E-03	2.033	933.150	96.536	0.082	-
11496	Regper-ENG	EQT00000000104	L1025	18-03	470285.441	3340416.558	1.134E-03					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L1024. Therefore, this source was excluded from this modeling analysis.
11496	0520-00142-V14	EQT00000000105	L1026	18-02	470285.441	3340416.558	1.260E-03	2.033	933.150	96.536	0.082	-
11496	Regper-ENG	EQT00000000108	L1027	18-05	470285.441	3340416.558	1.134E-03					This is a duplicate source ID for this facility found in the LDEQ's emission inventory. Refer to Model ID: L1028. Therefore, this source was excluded from this modeling analysis.
11496	Regper-ENG	EQT00000000108	L1028	18-05	470285.441	3340416.558	1.260E-03	2.374	933.150	134.828	0.070	-
11496	0520-00142-V14	SCN00000000002	L1029	88-90a	470285.441	3340416.558	1.964E+00	73.457	513.150	10.973	1.890	SCN00000000002 is an alternate operating scenario for EQT00000000013. Consistent with the modeling analysis performed for this facility and review of the modeling report submitted to LDEQ in October 2019, this source was excluded.
11496	0520-00142-V14	EQT00000000083	L1058	95-170	470322.000	3340466.000	1.410E-03	2.987	804.261	56.775	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
11496	0520-00142-V14	EQT00000000064	L1059	90-351	470319.754	3340504.340	1.386E-01	24.323	438.150	28.816	0.838	-
11496	0520-00142-V14	EQT00000000046	L1060	88-350	470319.769	3340509.880	1.386E-01	24.323	438.150	28.816	0.838	-
11496	0520-00142-V14	EQT00000000068	L1061	95-10	470358.183	3340476.533	8.190E-02	26.579	300.928	1.320	0.152	-
11496	0520-00142-V14	EQT00000000069	L1062	95-15	470398.531	3340446.504	6.552E-02	15.240	353.150	11.250	0.509	-
11496	0520-00142-V14	FUG00000000001	L1063	95-300	470388.008	3340470.911	2.520E-02	1.000	0.000	0.001	1.000	-
11496	0520-00142-V14	EQT00000000035	L1123	88-301	470403.392	3340464.221	3.780E-03	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000030	L1124	88-271	470408.202	3340463.100	1.512E-02	34.717	378.706	12.030	0.405	-
11496	0520-00142-V14	EQT00000000037	L1125	88-311	470403.407	3340469.762	3.780E-03	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000028	L1126	88-221	470374.604	3340497.543	1.310E-01	32.796	373.706	27.615	0.914	-
11496	0520-00142-V14	EQT00000000041	L1127	88-332	470412.052	3340463.090	3.780E-03	34.717	324.817	18.367	0.152	-
11496	0520-00142-V14	EQT00000000031	L1128	88-272	470408.217	3340468.641	1.512E-02	34.717	378.706	12.030	0.405	-
11496	0520-00142-V14	EQT00000000029	L1129	88-222	470378.454	3340497.532	1.310E-01	32.796	373.706	23.195	0.914	-
11496	0520-00142-V14	EQT00000000039	L1130	88-321	470403.425	3340476.410	3.780E-03	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000040	L1131	88-331	470412.067	3340468.630	3.780E-03	34.717	324.817	18.367	0.152	-
11496	0520-00142-V14	EQT00000000032	L1132	88-281	470408.235	3340475.289	1.512E-02	34.717	378.706	12.030	0.405	-
11496	0520-00142-V14	EQT00000000036	L1133	88-302	470403.440	3340481.951	3.780E-03	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000042	L1134	88-333	470412.085	3340475.279	3.780E-03	34.717	324.817	18.367	0.152	-
11496	0520-00142-V14	EQT00000000033	L1135	88-282	470408.250	3340480.830	1.512E-02	34.717	378.706	12.030	0.405	-
11496	0520-00142-V14	EQT00000000078	L1136	95-310	470413.054	3340477.493	3.780E-04	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000038	L1137	88-312	470403.455	3340487.492	3.780E-03	34.686	330.928	17.462	0.204	-
11496	0520-00142-V14	EQT00000000043	L1138	88-334	470412.100	3340480.819	3.780E-03	34.717	324.817	18.367	0.152	-
11496	0520-00142-V14	EQT00000000034	L1139	88-291	470408.268	3340487.479	1.512E-02	34.717	378.706	12.030	0.405	-
11496	0520-00142-V14	EQT00000000044	L1140	88-341	470413.080	3340487.466	3.780E-03	33.985	324.817	18.367	0.152	-
11496	0520-00142-V14	EQT00000000045	L1141	88-342	470411.170	3340493.011	3.780E-03	33.376	335.372	3.475	0.405	-
11496	0520-00142-V14	EQT00000000072	L1142	95-130	470297.960	3340631.834	1.260E-04	15.027	0.000	0.001	1.000	-
11496	0520-00142-V14	EQT00000000024	L1144	88-150	470408.468	3340561.723	2.533E-01	29.809	348.150	17.822	0.509	-
11496	0520-00142-V14	EQT00000000009	L1145	88-51	470380.712	3340620.529	1.260E-04	26.121	305.928	21.217	0.152	-
11496	0520-00142-V14	EQT00000000010	L1146	88-61	470385.534	3340623.840	1.260E-04	32.309	311.483	16.816	0.152	-
11496	0520-00142-V14	EQT00000000005	L1147	88-31	470391.309	3340623.824	1.260E-04	32.705	317.594	24.579	0.152	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
11496	0520-00142-V14	EQT00000000013	L1148	88-90	470353.979	3340666.034	1.964E+00	73.457	513.150	10.973	1.890	-
11496	0520-00142-V14	EQT00000000011	L1150	88-62	470409.598	3340623.775	1.260E-04	33.589	311.483	16.816	0.152	-
11496	0520-00142-V14	EQT00000000006	L1158	88-32	470442.326	3340623.687	1.260E-04	33.193	317.594	24.579	0.152	-
11496	0520-00142-V14	EQT00000000016	L1160	88-111	470403.942	3340668.115	1.260E-03	31.394	334.261	15.057	0.204	-
11496	0520-00142-V14	EQT00000000023	L1161	88-142	470423.149	3340651.442	3.150E-02	30.907	305.372	18.870	0.253	-
11496	0520-00142-V14	EQT00000000022	L1162	88-141	470423.170	3340659.199	3.150E-02	30.785	305.372	18.870	0.253	-
11496	0520-00142-V14	EQT00000000018	L1163	88-121	470403.500	3340682.522	6.300E-03	33.406	573.150	23.473	0.253	-
11496	0520-00142-V14	EQT00000000066	L1164	90-521	470477.914	3340613.618	2.520E-03	8.504	298.150	8.306	0.152	-
11496	0520-00142-V14	EQT00000000025	L1165	88-160	470475.802	3340615.840	1.260E-03	30.724	312.594	7.928	0.204	-
11496	0520-00142-V14	EQT00000000021	L1166	88-132	470421.667	3340672.943	1.260E-02	33.406	573.150	47.067	0.253	-
11496	0520-00142-V14	EQT00000000063	L1167	90-161	470484.562	3340615.816	1.260E-03	30.724	312.594	7.928	0.204	-
11496	0520-00142-V14	EQT00000000020	L1168	88-131	470403.525	3340691.720	1.260E-02	33.406	573.150	47.067	0.253	-
11496	0520-00142-V14	EQT00000000017	L1169	88-112	470422.252	3340675.823	1.260E-03	29.627	334.261	15.057	0.204	-
11496	0520-00142-V14	EQT00000000067	L1170	90-522	470489.465	3340613.587	2.520E-03	8.504	298.150	8.306	0.152	-
11496	0520-00142-V14	EQT00000000019	L1172	88-122	470421.693	3340682.806	6.300E-03	33.406	573.150	23.473	0.253	-
11496	0520-00142-V14	EQT00000000082	L1174	95-160	470467.830	3340666.469	1.410E-03	5.944	756.483	86.042	0.253	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
203831	3136-V2	EQT00000000006	L1238	ETH-FLARE2	470513.640	3342872.670	1.169E+01	13.716	1273.150	20.000	19.571	Updated the stack diameter based on heat input of the flare obtained from EDMS Document ID: 12232403 and the default flare stack velocity was utilized.
203831	3136-V2	EQT00000000005	L1239	ETH-FLARE1	470533.023	3342994.734	1.169E+01	39.624	1273.150	22.811	18.288	-
203831	3136-V2	EQT00000000001	L1249	ETH-BOILER	470754.370	3342958.902	3.944E-01	64.922	422.039	15.545	2.134	-
203831	3136-V2	EQT00000000002	L1250	ETH-CT	470525.767	3343159.201	1.260E-04	13.161	319.261	10.244	9.754	-
195519	0520-00488-V4	EQT00000000020	L1255	MEG-TOX	470817.959	3342985.993	5.670E-02	15.240	533.150	14.603	1.366	-
195519	0520-00488-V4	EQT00000000001	L1256	MEG-CT	470939.008	3342906.994	3.780E-04	15.850	315.928	11.015	9.997	-
203831	3136-V2	EQT00000000011	L1257	ETH-H-1101	470723.044	3343084.648	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000003	L1258	ETH-DECOKE1	470739.302	3343082.499	2.356E-01	73.152	572.039	24.771	0.914	-
203831	3136-V2	EQT00000000012	L1259	ETH-H-1102	470723.083	3343099.386	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000013	L1260	ETH-H-1103	470723.092	3343102.600	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000014	L1261	ETH-H-1104	470723.035	3343117.338	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000015	L1262	ETH-H-1105	470723.046	3343121.438	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000016	L1263	ETH-H-1106	470723.081	3343134.847	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000017	L1264	ETH-H-1107	470723.091	3343138.393	1.310E-01	73.152	397.594	10.973	2.350	-
203831	3136-V2	EQT00000000004	L1265	ETH-DECOKE2	470739.379	3343147.325	2.356E-01	73.152	572.039	24.771	0.914	-
203831	3136-V2	EQT00000000007	L1270	ETH-FWP1	471316.966	3343139.038	3.308E-04	9.144	738.706	159.822	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
203831	3136-V2	EQT00000000008	L1271	ETH-FWP2	471316.966	3343139.038	3.308E-04	9.144	738.706	159.822	0.152	
151876	7777-00847-ACI-0	EQT00000000002	L1280	ENG	468890.903	3345562.507	2.772E-02	1.000	0.000	0.001	1.000	-
1255	2269-V7	EQT00000000544	L1281	563	472145.000	3343279.000	1.260E-04	4.801	344.261	20.025	0.052	-
1255	897-V9	EQT00000000088	L1282	533B	472050.501	3343374.615	3.780E-04	9.754	313.706	11.710	5.486	-
1255	2106-V7	EQT00000000066	L1283	011	471622.980	3343764.004	1.310E+00	24.994	420.928	19.227	4.840	-
1255	2106-V7	EQT00000000065	L1284	010	471622.964	3343795.032	1.310E+00	24.994	420.928	19.114	4.840	-
1255	897-V9	EQT00000000080	L1285	030	472129.321	3343376.630	1.147E-01	45.720	444.261	3.645	2.374	-
1255	2106-V7	EQT00000000064	L1286	009	471673.035	3343769.969	2.276E+00	24.384	449.817	14.691	5.334	-
1255	2106-V7	EQT00000000663	L1287	009A	471684.968	3343770.049	2.276E+00	24.384	449.817	19.998	4.572	-
1255	897-V9	EQT00000000077	L1288	016	472122.472	3343407.675	7.434E-02	46.634	505.372	9.921	1.219	-
1255	897-V9	EQT00000000078	L1289	017	472137.482	3343406.751	7.434E-02	46.634	505.372	9.921	1.219	-
1255	2106-V7	EQT00000000063	L1290	008	471673.016	3343837.011	2.276E+00	24.384	449.817	14.691	5.334	-
1255	2798-V5	EQT00000000592	L1291	533P	471593.964	3343929.967	1.260E-03	7.010	315.372	3.581	6.477	-
1255	2798-V5	EQT00000000001	L1292	105	471818.978	3343754.965	4.284E-02	20.726	294.261	15.429	1.372	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1255	897-V9	EQT00000000082	L1293	308	472104.275	3343517.648	2.589E-01	19.294	449.817	2.155	0.914	Based on EDMS Document ID: 9708826 (Pg 123/182), this source only operates in certain situations such as reactor startups, shutdowns, catalyst charging, and scrubber maintenance operations which occurs rarely. The emissions from normal operation are accounted under EQTs 261, 392, and 393 of 2040 Permit. Therefore, this source was excluded.
1255	897-V9	EQT00000000083	L1294	531A	472104.275	3343517.648	1.764E-02	28.651	449.817	2.478	1.067	-
1255	897-V9	EQT00000000084	L1295	531B	472104.275	3343517.648	1.764E-02	28.651	449.817	2.478	1.067	-
1255	897-V9	EQT00000000085	L1296	532A	472106.503	3343523.516	5.322E-06	2.438	310.928	0.701	0.558	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	RLP00000000010	L1297	123	471815.966	3343781.014	5.835E-02	13.716	369.261	9.565	0.610	Based on OO8 GCXVII Activity, the SUSD, cut in and cut out operations are operated for 4.75 hours. Therefore, the emissions were normalized based on 4.75 hours of operation in a day. (Document ID: 11352541 (pg: 217/241).
1255	897-V9	EQT00000000086	L1298	532B	472126.520	3343523.797	5.322E-06	2.487	310.928	0.701	0.558	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	EQT00000000012	L1299	533M	471639.001	3343930.958	1.260E-03	19.711	315.372	12.241	8.534	-
1255	2798-V5	EQT00000000599	L1300	159	471866.017	3343747.974	1.260E-03	4.572	533.150	140.126	0.076	-
1255	2798-V5	RLP00000000009	L1301	122	471815.996	3343792.982	5.835E-02	13.716	369.261	9.565	0.610	Based on OO8 GCXVII Activity, the SUSD, cut in and cut out operations are operated for 4.75 hours. Therefore, the emissions were normalized based on 4.75 hours of operation in a day. (Document ID: 11352541 (pg: 217/241).
1255	897-V9	EQT00000000087	L1302	533A	472085.442	3343566.676	2.520E-04	9.754	313.706	11.710	5.486	-
1255	2798-V5	RLP00000000008	L1303	121	471816.022	3343802.955	5.835E-02	13.716	369.261	9.565	0.610	Based on OO8 GCXVII Activity, the SUSD, cut in and cut out operations are operated for 4.75 hours. Therefore, the emissions were normalized based on 4.75 hours of operation in a day. (Document ID: 11352541 (pg: 217/241).
1255	Regper-ENG	EQT00000000686	L1304	162	471877.964	3343753.705	1.260E-03	2.438	668.150	63.045	0.101	-
1255	2359-V6	EQT00000000552	L1305	34	472277.000	3343415.000	7.277E-02	4.572	477.594	30.267	0.229	Per current permit, this source operates intermittently. Therefore, the emissions were normalized.
1255	2359-V6	EQT00000000673	L1306	565	472277.000	3343415.000	7.192E-05	4.572	866.483	44.678	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	EQT00000000681	L1307	041	471841.966	3343788.039	4.315E-04	2.566	477.594	165.263	0.101	
1255	2798-V5	EQT00000000682	L1308	042	471841.966	3343788.039	2.733E-04	2.566	477.594	102.879	0.101	
1255	897-V9	EQT00000000079	L1309	021	472139.364	3343541.606	1.134E-02	12.192	1144.261	3.679	0.838	-
1255	2798-V5	RLP00000000007	L1310	120	471815.960	3343816.031	5.835E-02	13.716	369.261	9.565	0.610	Based on OO8 GCXVII Activity, the SUSD, cut in and cut out operations are operated for 4.75 hours. Therefore, the emissions were normalized based on 4.75 hours of operation in a day. (Document ID: 11352541 (pg: 217/241).
1255	2798-V5	RLP00000000006	L1311	119	471815.990	3343827.999	5.835E-02	13.716	369.261	9.565	0.610	
1255	2798-V5	RLP00000000005	L1312	118	471816.026	3343841.961	5.835E-02	13.716	369.261	9.565	0.610	
1255	2798-V5	RLP00000000004	L1313	117	471815.969	3343857.032	5.835E-02	13.716	369.261	9.565	0.610	
1255	2798-V5	RLP00000000003	L1314	116	471815.997	3343868.002	5.835E-02	13.716	369.261	9.565	0.610	
1255	2269-V7	EQT00000000353	L1315	544	472811.000	3343073.000	1.260E-03	3.658	349.817	1.631	0.052	-
1255	2269-V7	EQT00000000685	L1322	044	472314.042	3343661.949	1.512E-02	2.420	477.594	65.666	0.101	-
1255	2270-V6	EQT00000000279	L1323	533F	472357.000	3343660.000	1.260E-04	5.919	319.261	8.053	4.267	-
1255	2040-V10	EQT00000000261	L1324	345	472312.996	3343704.947	5.468E-01	23.774	338.706	12.229	1.067	-
1255	2270-V6	RLP00000000024	L1325	524C	472388.575	3343643.809	1.033E-01	10.058	533.150	27.167	0.152	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1255	2270-V6	RLP00000000023	L1326	524B	472395.312	3343643.792	1.033E-01	10.058	533.150	27.167	0.152	-
1255	2270-V6	RLP00000000022	L1327	524A	472401.085	3343643.778	1.033E-01	10.058	533.150	27.167	0.152	-
1255	2270-V6	EQT00000000278	L1328	523B	472406.859	3343643.763	6.242E-05	1.829	299.817	0.725	0.305	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2270-V6	RLP00000000021	L1329	524	472406.859	3343643.763	1.260E-03	6.096	533.150	27.167	0.152	-
1255	2270-V6	EQT00000000277	L1330	523A	472412.633	3343643.749	6.242E-05	1.829	299.817	0.725	0.305	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2106-V7	EQT00000000068	L1331	033	472780.965	3343317.036	2.291E+00	30.480	366.483	28.109	5.410	-
1255	2040-V10	EQT00000000392	L1332	346	472371.963	3343696.044	1.052E+00	29.870	316.483	12.713	0.914	-
1255	2040-V10	EQT00000000393	L1333	347	472371.963	3343696.044	1.222E-01	30.175	344.261	3.688	0.762	-
1255	2106-V7	EQT00000000067	L1334	032	472780.978	3343361.029	2.291E+00	30.480	366.483	28.109	5.410	-
1255	2270-V6	RLP00000000025	L1338	524D	472742.258	3343463.406	1.033E-01	10.058	533.150	27.167	0.152	-
1255	2106-V7	EQT00000000072	L1339	533N	472808.040	3343407.947	1.260E-04	13.716	315.372	8.879	9.906	-
1255	2270-V6	RLP00000000026	L1340	524E	472748.032	3343463.392	1.033E-01	10.058	533.150	27.167	0.152	-
1255	2270-V6	EQT00000000602	L1341	22	472377.700	3343897.800	5.040E-03	12.802	644.261	4.877	0.610	-
1255	2350-V9	EQT00000000496	L1342	533E	472213.003	3344042.960	1.260E-04	12.802	319.261	13.564	3.871	-
1255	3021-V6	EQT00000000377	L1343	101	472724.990	3343600.968	4.284E-02	17.069	305.372	15.947	0.457	-
1255	3021-V6	EQT00000000375	L1344	100A	472825.046	3343512.955	1.260E-03	19.812	322.039	11.771	0.610	-
1255	2106-V7	EQT00000000062	L1345	007	472966.976	3343391.042	1.065E+00	45.720	429.817	13.701	3.200	-
1255	3021-V6	EQT00000000383	L1348	152	472772.980	3343588.992	3.351E-03	3.048	366.483	64.502	0.152	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	EQT00000000598	L1349	158	472705.040	3343665.954	1.260E-03	4.572	533.150	140.126	0.076	-
1255	2350-V9	EQT00000000495	L1350	533D	472340.022	3344003.964	2.520E-04	10.668	319.261	11.723	3.807	-
1255	3021-V6	EQT00000000376	L1351	100C	472851.967	3343581.039	1.260E-03	16.398	287.594	23.351	0.387	-
185422	0520-00471-V1	ARE00000000001	L1352	559	471898.320	3344421.299	5.330E-01	1.000	0.000	0.001	1.000	Per current permit, this source operates intermittently. Therefore, the emissions were normalized.
185422	0520-00471-V1	EQT00000000001	L1353	23	471898.320	3344421.299	3.447E+00	24.384	616.483	18.370	1.981	-
185422	0520-00471-V1	EQT00000000002	L1354	29	471898.320	3344421.299	3.276E-01	33.528	399.817	16.170	0.610	-
185422	0520-00471-V1	EQT00000000003	L1355	200	471898.320	3344421.299	6.376E-01	25.908	360.928	13.201	1.067	-
185422	0520-00471-V1	EQT00000000004	L1356	202	471898.320	3344421.299	5.418E-02	20.422	360.928	11.500	0.914	-
185422	0520-00471-V1	EQT00000000005	L1357	203	471898.320	3344421.299	1.562E-01	16.154	360.928	5.087	1.042	-
185422	0520-00471-V1	EQT00000000006	L1358	204	471898.320	3344421.299	1.562E-01	19.507	360.928	5.087	1.042	-
185422	0520-00471-V1	EQT00000000007	L1359	205	471898.320	3344421.299	1.562E-01	17.069	360.928	5.087	1.042	-
185422	0520-00471-V1	EQT00000000008	L1360	209	471898.320	3344421.299	5.796E-02	39.624	302.594	10.860	0.509	-
185422	0520-00471-V1	EQT00000000009	L1361	210	471898.320	3344421.299	5.796E-02	39.624	302.594	10.860	0.509	-
185422	0520-00471-V1	EQT00000000010	L1362	211	471898.320	3344421.299	1.562E-01	20.117	360.928	5.148	1.036	-
185422	0520-00471-V1	EQT00000000011	L1363	212	471898.320	3344421.299	1.008E-02	4.572	313.706	20.516	0.433	-
185422	0520-00471-V1	EQT00000000012	L1364	213	471898.320	3344421.299	3.780E-03	3.048	313.706	13.350	0.305	-
185422	0520-00471-V1	EQT00000000013	L1365	214	471898.320	3344421.299	5.040E-03	2.438	313.706	26.365	0.253	-
185422	0520-00471-V1	EQT00000000014	L1366	215	471898.320	3344421.299	1.260E-03	9.449	352.594	24.799	0.152	-
185422	0520-00471-V1	EQT00000000015	L1367	216	471898.320	3344421.299	1.638E-02	42.062	338.706	23.223	0.509	-
185422	0520-00471-V1	EQT00000000016	L1368	217	471898.320	3344421.299	5.040E-03	10.058	313.706	6.959	0.509	-
185422	0520-00471-V1	EQT00000000017	L1369	218	471898.320	3344421.299	7.560E-03	44.196	324.817	20.861	0.357	-
185422	0520-00471-V1	EQT00000000018	L1370	219	471898.320	3344421.299	6.300E-03	42.672	324.817	14.530	0.405	-
185422	0520-00471-V1	EQT00000000019	L1371	220	471898.320	3344421.299	3.515E-01	20.117	413.706	23.040	1.015	-
185422	0520-00471-V1	EQT00000000020	L1372	221	471898.320	3344421.299	6.300E-03	41.453	313.706	14.033	0.405	-
185422	0520-00471-V1	EQT00000000021	L1373	222	471898.320	3344421.299	2.520E-03	25.908	322.039	15.411	0.253	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
185422	0520-00471-V1	EQT00000000022	L1374	223	471898.320	3344421.299	2.520E-03	32.309	322.039	17.819	0.204	-
185422	0520-00471-V1	EQT00000000023	L1375	224	471898.320	3344421.299	1.260E-03	18.288	394.261	9.367	0.204	-
185422	0520-00471-V1	EQT00000000024	L1376	225	471898.320	3344421.299	1.260E-03	18.288	394.261	9.367	0.204	-
185422	0520-00471-V1	EQT00000000025	L1377	226	471898.320	3344421.299	1.260E-03	18.288	394.261	9.367	0.204	-
185422	0520-00471-V1	EQT00000000026	L1378	227	471898.320	3344421.299	1.260E-03	25.908	313.706	0.527	0.533	-
185422	0520-00471-V1	EQT00000000027	L1379	229	471898.320	3344421.299	1.260E-03	38.100	313.706	0.527	0.533	-
185422	0520-00471-V1	EQT00000000028	L1380	230	471898.320	3344421.299	1.260E-03	25.908	313.706	232.559	0.040	-
185422	0520-00471-V1	EQT00000000029	L1381	231	471898.320	3344421.299	2.520E-03	4.572	313.706	15.085	0.244	-
185422	0520-00471-V1	EQT00000000030	L1382	232	471898.320	3344421.299	2.520E-03	32.309	313.706	15.085	0.244	-
185422	0520-00471-V1	EQT00000000031	L1383	233	471898.320	3344421.299	1.260E-03	9.144	313.706	232.559	0.040	-
185422	0520-00471-V1	EQT00000000032	L1384	234	471898.320	3344421.299	1.260E-03	1.524	313.706	16.548	0.152	-
185422	0520-00471-V1	EQT00000000033	L1385	235	471898.320	3344421.299	1.260E-03	18.288	491.483	364.276	0.040	-
185422	0520-00471-V1	EQT00000000034	L1386	236	471898.320	3344421.299	3.780E-03	25.908	322.039	35.043	0.204	-
185422	0520-00471-V1	EQT00000000035	L1387	237	471898.320	3344421.299	3.780E-03	25.908	322.039	35.043	0.204	-
185422	0520-00471-V1	EQT00000000036	L1388	238	471898.320	3344421.299	2.520E-03	25.908	322.039	15.411	0.253	-
185422	0520-00471-V1	EQT00000000037	L1389	239	471898.320	3344421.299	2.520E-03	3.962	313.706	31.717	0.152	-
185422	0520-00471-V1	EQT00000000038	L1390	240	471898.320	3344421.299	1.260E-03	3.048	313.706	52.956	0.076	-
185422	0520-00471-V1	EQT00000000039	L1391	241	471898.320	3344421.299	1.260E-03	23.165	322.039	25.481	0.152	-
185422	0520-00471-V1	EQT00000000040	L1392	242	471898.320	3344421.299	2.520E-03	32.309	322.039	15.411	0.253	-
185422	0520-00471-V1	EQT00000000041	L1393	244	471898.320	3344421.299	8.820E-03	20.117	363.706	11.500	0.914	-
185422	0520-00471-V1	EQT00000000042	L1394	245	471898.320	3344421.299	1.260E-03	17.069	313.706	6.373	0.204	-
185422	0520-00471-V1	EQT00000000043	L1395	246	471898.320	3344421.299	1.260E-03	3.048	313.706	12.290	0.204	-
185422	0520-00471-V1	EQT00000000044	L1396	247	471898.320	3344421.299	1.940E-01	41.910	385.928	26.786	1.219	-
185422	0520-00471-V1	EQT00000000045	L1397	248	471898.320	3344421.299	2.520E-03	32.004	366.483	25.119	0.204	-
185422	0520-00471-V1	EQT00000000046	L1398	249	471898.320	3344421.299	1.260E-03	18.898	322.039	25.481	0.152	-
185422	0520-00471-V1	EQT00000000047	L1399	252	471898.320	3344421.299	3.780E-03	32.004	355.372	36.817	0.204	-
185422	0520-00471-V1	EQT00000000048	L1400	253	471898.320	3344421.299	3.780E-03	25.908	313.706	10.830	1.000	-
185422	0520-00471-V1	EQT00000000049	L1401	254	471898.320	3344421.299	1.260E-03	4.877	313.706	27.581	0.152	-
185422	0520-00471-V1	EQT00000000050	L1402	255	471898.320	3344421.299	5.040E-03	32.309	366.483	20.135	0.305	-
185422	0520-00471-V1	EQT00000000051	L1403	256	471898.320	3344421.299	8.820E-03	32.309	358.150	21.214	0.405	-
185422	0520-00471-V1	EQT00000000052	L1404	257	471898.320	3344421.299	3.780E-03	32.309	322.039	31.535	0.204	-
185422	0520-00471-V1	EQT00000000053	L1405	258	471898.320	3344421.299	5.040E-03	32.309	322.039	21.235	0.305	-
185422	0520-00471-V1	EQT00000000054	L1406	259	471898.320	3344421.299	2.520E-03	28.651	322.039	22.077	0.204	-
185422	0520-00471-V1	EQT00000000055	L1407	260	471898.320	3344421.299	2.520E-02	18.288	322.039	16.005	0.405	-
185422	0520-00471-V1	EQT00000000057	L1408	263	471898.320	3344421.299	3.780E-03	16.764	326.483	35.116	0.253	-
185422	0520-00471-V1	EQT00000000058	L1409	264	471898.320	3344421.299	3.780E-03	16.764	326.483	35.116	0.253	-
185422	0520-00471-V1	EQT00000000059	L1410	265	471898.320	3344421.299	3.780E-03	16.764	326.483	35.116	0.253	-
185422	0520-00471-V1	EQT00000000060	L1411	266	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000061	L1412	267	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000062	L1413	268	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000063	L1414	269	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000064	L1415	270	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000065	L1416	271	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000066	L1417	272	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000069	L1418	533I	471898.320	3344421.299	6.300E-03	3.658	322.039	13.917	2.438	-
185422	0520-00471-V1	EQT00000000070	L1419	533J	471898.320	3344421.299	1.386E-02	8.534	322.039	7.315	5.182	-
185422	0520-00471-V1	EQT00000000071	L1420	564	471898.320	3344421.299	1.072E-02	4.572	366.483	0.001	0.204	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
185422	0520-00471-V1	EQT00000000072	L1421	273	471898.320	3344421.299	1.260E-03	6.096	313.706	25.871	0.152	-
185422	0520-00471-V1	EQT00000000073	L1422	274	471898.320	3344421.299	3.780E-03	35.966	322.039	15.411	0.253	-
185422	0520-00471-V1	EQT00000000074	L1423	275	471898.320	3344421.299	1.260E-03	9.144	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000075	L1424	276	471898.320	3344421.299	3.780E-03	32.309	322.039	31.535	0.204	-
185422	0520-00471-V1	EQT00000000076	L1425	277	471898.320	3344421.299	5.040E-03	32.309	322.039	21.235	0.305	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
185422	0520-00471-V1	EQT00000000084	L1426	279	471898.320	3344421.299	3.780E-03	34.366	322.039	37.463	0.204	-
185422	0520-00471-V1	EQT00000000085	L1427	280	471898.320	3344421.299	5.040E-03	34.442	322.039	21.235	0.305	-
185422	0520-00471-V1	EQT00000000086	L1428	281	471898.320	3344421.299	1.260E-03	14.478	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000087	L1429	282	471898.320	3344421.299	1.462E-01	41.300	385.928	20.199	1.219	-
185422	0520-00471-V1	EQT00000000088	L1430	283	471898.320	3344421.299	3.780E-03	10.363	355.372	36.817	0.204	-
185422	0520-00471-V1	EQT00000000089	L1431	284	471898.320	3344421.299	1.260E-03	14.478	323.150	6.209	0.076	-
185422	0520-00471-V1	EQT00000000090	L1432	285	471898.320	3344421.299	3.780E-03	10.363	355.372	36.817	0.204	-
185422	0520-00471-V1	EQT00000000091	L1433	286	471898.320	3344421.299	3.780E-03	21.946	313.706	8.580	0.433	-
185422	0520-00471-V1	EQT00000000093	L1434	604	471898.320	3344421.299	1.147E-01	9.296	672.039	3.261	1.372	-
185422	0520-00471-V1	EQT00000000094	L1435	605	471898.320	3344421.299	1.147E-01	9.296	672.039	3.261	1.372	-
185422	0520-00471-V1	EQT00000000099	L1436	610	471898.320	3344421.299	1.260E-03	30.480	299.817	0.001	1.000	-
185422	0520-00471-V1	EQT00000000100	L1437	611	471898.320	3344421.299	1.260E-03	6.096	299.817	0.001	1.000	-
185422	0520-00471-V1	FUG00000000001	L1438	349K	471898.320	3344421.299	1.386E-02	1.000	0.000	0.001	1.000	-
1255	3021-V6	EQT00000000382	L1439	533L	472851.047	3343637.002	5.040E-04	17.221	304.261	9.912	11.616	-
1255	2798-V5	EQT00000000677	L1440	036	472749.014	3343741.974	1.726E-04	2.566	477.594	68.732	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	EQT00000000680	L1441	039	472749.024	3343745.963	1.726E-04	2.566	477.594	68.732	0.101	
1255	2359-V6	EQT00000000341	L1442	554	472414.603	3344043.780	1.525E-01	3.048	299.817	0.001	1.000	-
1255	2798-V5	RLP00000000011	L1443	124	472819.006	3343715.980	2.948E-01	16.764	364.261	6.587	0.747	-
1255	2798-V5	RLP00000000012	L1444	125	472819.035	3343727.948	2.948E-01	16.764	364.261	6.587	0.747	-
1255	2695-V16	EQT00000000433	L1445	20	472318.988	3344172.010	5.753E-04	16.968	644.261	10.129	0.610	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2695-V16	EQT00000000442	L1446	529	472302.961	3344189.005	7.308E-02	18.288	310.928	19.404	0.305	-
1255	2798-V5	EQT00000000018	L1447	106	472854.989	3343713.010	4.284E-02	21.641	333.150	0.735	1.676	-
1255	2798-V5	EQT00000000021	L1448	107	472854.989	3343713.010	4.284E-02	21.641	333.150	0.646	1.676	-
1255	2798-V5	EQT00000000679	L1449	038	472773.954	3343787.013	1.726E-04	2.566	477.594	68.732	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2695-V16	EQT00000000554	L1450	309	472321.436	3344188.737	1.553E-01	22.860	310.928	4.852	0.610	
1255	2798-V5	EQT00000000678	L1451	037	472773.981	3343797.983	1.726E-04	2.566	477.594	68.732	0.101	
1255	2695-V16	EQT00000000443	L1452	530	472312.029	3344197.958	3.193E-05	3.048	298.150	0.003	0.610	
1255	2798-V5	EQT00000000600	L1453	160	472649.961	3343921.960	5.040E-03	4.572	533.150	94.387	0.076	-
1255	2798-V5	RLP00000000013	L1454	126	472820.023	3343777.036	5.835E-02	16.764	364.261	6.587	0.747	Based on OO8 GCXVII Activity, the SUSD, cut in and cut out operations are operated for 4.75 hours. Therefore, the emissions were normalized based on 4.75 hours of operation in a day. (Document ID: 11352541 (pg: 217/241).
1255	2798-V5	RLP00000000014	L1455	127	472820.048	3343787.009	5.835E-02	16.764	364.261	6.587	0.747	
1255	2695-V16	EQT00000000591	L1456	310	472378.955	3344178.951	3.418E-03	1.829	299.817	0.024	0.610	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2798-V5	EQT00000000593	L1457	533Q	472837.041	3343810.016	1.260E-03	12.192	304.261	8.909	5.486	-
1255	2695-V16	EQT00000000432	L1458	15	472438.967	3344165.946	6.300E-02	38.710	505.372	6.840	1.448	-
1255	2216-V6	EQT00000000025	L1459	533G	472807.694	3343849.982	1.260E-03	12.497	304.261	11.723	6.096	-
1255	2695-V16	EQT00000000444	L1463	533C	472380.015	3344255.964	1.260E-04	11.582	302.594	15.795	7.925	-
1255	2798-V5	EQT00000000395	L1464	149	472706.972	3343978.000	6.300E-03	30.480	323.428	102.413	0.076	-
1255	Regper-ENG	EQT00000000688	L1465	045	472694.115	3343992.992	1.438E-05	1.000	0.000	0.001	1.000	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	Regper-ENG	EQT00000000689	L1466	46	472694.115	3343992.992	1.438E-05	1.000	0.000	0.001	1.000	
1255	2798-V5	TRT00000000001	L1467	019A	472894.020	3343891.987	1.512E-02	19.812	644.261	4.761	0.914	-
1255	2359-V6	EQT00000000334	L1468	133	473009.628	3343789.643	1.260E-03	7.315	299.817	10.098	1.006	-

$PM_{2.5}$ 24-hr Increment Offsite Inventory Sources

AI Number	Permit number	TEMPO ID	Model ID	DESCRIPTION	X COORDINATE (m)	Y COORDINATE (m)	EMISSION RATE (g/s)	STACK HEIGHT (m)	STACK GAS TEMPERATURE (K)	STACK GAS EXIT VELOCITY (m/s)	STACK DIAMETER (m)	Comment
1255	2798-V5	EQT00000000601	L1469	161	472744.034	3344061.017	3.780E-03	6.300	533.150	9.010	0.457	-
1255	2798-V5	EQT00000000011	L1470	533O	472776.018	3344037.002	1.260E-03	8.586	305.372	9.805	4.877	-
1255	Regper-ENG	EQT00000000710	L1471	043	472549.055	3344244.457	2.733E-04	3.048	819.261	136.800	0.101	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2206-V3	EQT00000000139	L1472	26	472490.851	3344364.393	2.772E-02	5.486	505.372	13.664	0.610	-
1255	2206-V3	EQT00000000140	L1473	27	472490.851	3344364.393	6.098E-01	13.716	1273.000	20.000	4.471	LDEQ flare default stack temperature and stack velocity were utilized. The stack diameter is calculated based on the permitted heat input.
1255	2359-V6	EQT00000000587	L1474	031B	472490.851	3344364.393	2.158E-04	2.819	864.817	76.487	0.128	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2359-V6	EQT00000000588	L1475	031C	472490.851	3344364.393	2.445E-04	3.200	758.706	86.103	0.152	
1255	2359-V6	EQT00000000589	L1476	031D	472490.851	3344364.393	2.790E-03	3.328	683.150	133.414	0.128	
1255	2216-V6	EQT00000000606	L1477	533R	472490.851	3344364.393	1.260E-03	4.267	304.261	13.158	1.000	-
1255	2359-V6	EQT00000000675	L1478	031A	472490.851	3344364.393	1.726E-04	2.234	690.372	131.975	0.128	It is an intermittent source. Since the form of the $PM_{2.5}$ 24-hour NAAQS is statistically-based (i.e., 98th percentile, averaged over 3 years), normalized emissions were modeled.
1255	2359-V6	EQT00000000676	L1479	031E	472490.851	3344364.393	2.158E-04	3.328	759.817	84.552	0.152	
84822	0520-00523-V0	EQT00000000001	L1495	001	469993.108	3346777.829	2.268E-01	1.000	0.000	0.001	1.000	-
84822	0520-00523-V0	EQT00000000002	L1496	002	469993.518	3346787.025	2.772E-02	1.000	0.000	0.001	1.000	-
196978	0520-00492-V1	GRP00000000002	L1606	Boilers and Superheaters Group	470666.797	3340155.010	4.309E-01	60.960	533.150	22.689	1.676	The stack parameters were obtained from EDMS Document ID: 12891144 (Pg: 26/69). The worst-case stack parameters between boilers and superheaters were utilized.

APPENDIX H. SECONDARY PM2.5 AND OZONE IMPACTS ANALYSIS

SECONDARY $PM_{2.5}$ AND OZONE IMPACTS ANALYSIS

Secondary pollutants are air pollutants formed through chemical reactions in the atmosphere. Secondary $PM_{2.5}$ and ozone share common sources of emissions and are formed in the atmosphere from chemical reactions with similar precursors. A description of the formation of both secondary $PM_{2.5}$ and ozone is provided below.

Ground-level ozone concentrations are the result of photochemical reactions among various chemical species. These reactions are likely to occur under certain ambient meteorological conditions (e.g., high ground-level air temperatures, light winds, and sunny conditions). The chemical species that contribute to ozone formation, referred to as ozone precursors, include NO_X and VOC emissions from both anthropogenic (e.g., mobile and stationary sources) and natural sources (e.g., vegetation). Regarding $PM_{2.5}$, total mass is often categorized into primary (i.e., emitted directly as $PM_{2.5}$ from sources) and secondary (i.e., $PM_{2.5}$ formed in the atmosphere by precursor emissions from sources). $PM_{2.5}$ is dominated by a variety of chemical components including sulfate, nitrate, ammonium, organic carbon, and sea-spray constituents.[1] $PM_{2.5}$ sulfate and nitrate are predominantly the result of chemical reactions of the oxidized products of SO_2 and NO_X precursor emissions.[2] The proposed Moss Lake Compressor Station, as detailed in Section 1 of this initial Title V and PSD application, will result in emissions of approximately, 323.45 tpy of NO_X emissions, 3.80 tpy of SO_2 emissions, and 144.86 tpy of VOC emissions. This section estimates the impact of these proposed precursor emissions on secondary $PM_{2.5}$ and ozone (i.e., NO_X and SO_2 impact on secondary $PM_{2.5}$ and NO_X and VOC impact on ozone).

1.1 TIER 1 DEMONSTRATION

The *Guideline on Air Quality Models* (hereafter referred to as *Guideline*) published in the Federal Register (FR) on January 17, 2017[3] and fully promulgated May 22, 2017, establishes a two-tiered demonstration approach for addressing single-source impacts on secondary $PM_{2.5}$ and ozone.[4] Tier 1 demonstrations rely on the use of technically credible relationships between emissions and ambient impacts based on existing modeling studies deemed sufficient for evaluating a source's impacts. Tier 2 demonstrations involve case-specific application of chemical transport modeling (e.g., with an Eulerian grid or Lagrangian model). A Tier 1 approach is used in this analysis.

One suggested Tier 1 demonstration approach in the *Guideline* is use of Modeled Emission Rates for Precursors (MERPs). The U.S. EPA discusses this approach in detail in the *Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and $PM_{2.5}$ under the PSD Permitting Program* (hereafter referred to as *MERPs Guidance*).[5] The MERPs Guidance is relevant for the PSD program and focuses on assessing the ambient impacts of precursors of ozone and $PM_{2.5}$ for

[1] U.S. EPA, *Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and $PM_{2.5}$ under the PSD Permitting Program*, EPA-454/R-19-003 (April 30, 2019). Office of Air Quality Planning and Standards, Research Triangle Park, NC. Pg. 13.

[2] Seinfeld, J.H., Pandis, S.N., 2012. *Atmospheric Chemistry and Physics: From Air Pollution to Climate Change*. John Wiley & Sons.

[3] *Revisions to the Guideline on Air Quality Models: Enhancements to the AERMOD Dispersion Modeling System and Incorporation of Approaches to Address Ozone and Fine Particulate Matter*, FR 82, No. 10 (January 17, 2017). Pgs. 5182-5235.

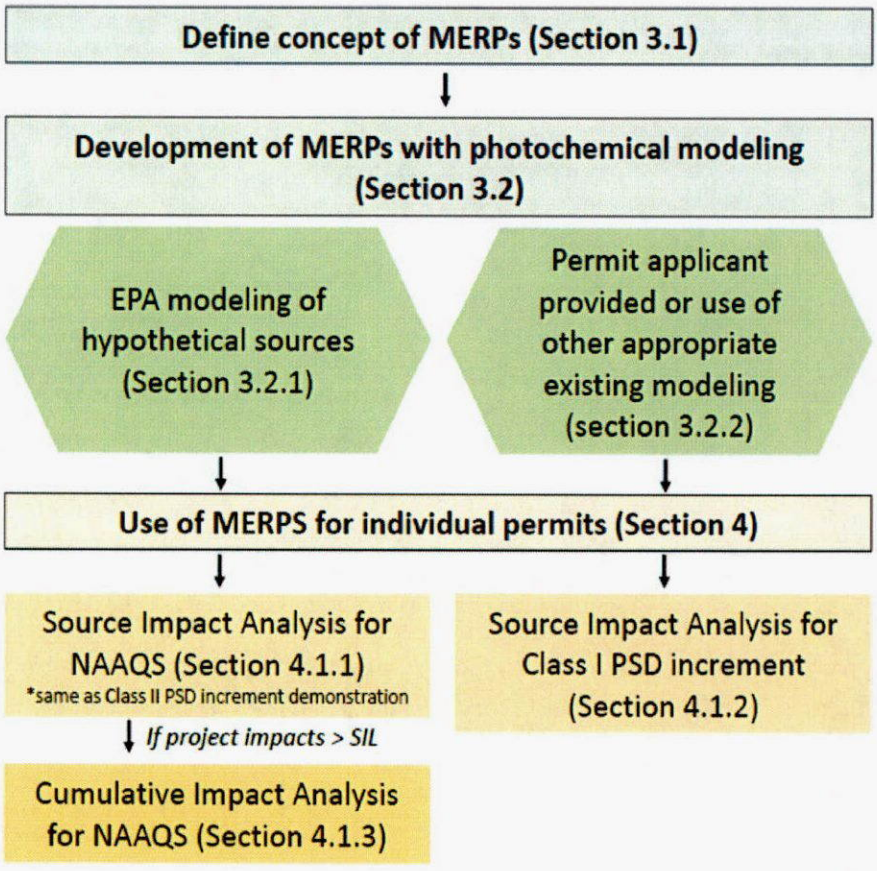
[4] U.S. EPA, *Guideline on Air Quality Models*, 40 CFR Part 51 - Appendix W (Revised, January 17, 2017).

[5] U.S. EPA, *Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and $PM_{2.5}$ under the PSD Permitting Program*, EPA-454/R-19-003 (April 30, 2019). Office of Air Quality Planning and Standards, Research Triangle Park, NC. **(hereafter referred to as *MERPs Guidance*).**

purposes of that program. MERPs can be viewed as a Tier 1 demonstration tool under the PSD permitting program that provides a straightforward and representative way to relate maximum source impacts with a critical air quality threshold (e.g., a significant impact level or SIL).[6] Specifically, the MERP framework may be used to describe an emission rate of an individual precursor (such as NO_X or VOC for ozone and NO_X and SO_2 for secondary $PM_{2.5}$) that is expected to result in a change in the level of ambient ozone or $PM_{2.5}$ that would be less than a specific air quality threshold for ozone or $PM_{2.5}$. The threshold is a numerical value that a permitting authority adopts and chooses to use in determining whether a projected impact causes or contributes to a violation of the ozone or $PM_{2.5}$ NAAQS, such as the SILs recommended by the U.S. EPA.[7] In short, MERPs are intended to be used with SILs as analytical tools for PSD air quality analyses, and if necessary, a cumulative impacts analysis including other nearby sources and background air quality. [8] Figure 1-1 illustrates the U.S. EPA's framework for the MERPs as a Tier 1 demonstration tool (from Figure 3-1, pg. 17, in the *MERPs Guidance*).

Figure 1-1. U.S. EPA's Framework for MERPs as a Tier 1 Demonstration Tool

(Figure 3-1, pg. 17, in the *MERPs Guidance*)



According to the *Guideline* and the *MERPs Guidance* regarding Tier 1 assessments, the U.S. EPA expects applicants to use existing empirical relationships from relevant technical information such as air quality modeling of hypothetical industrial sources with similar source characteristics and emission rates of

[6] *MERPs Guidance*, pg. 5.
[7] *MERPs Guidance*, pg. 10.
[8] *MERPs Guidance*, pgs. 6 and 16.

precursors that are located in similar atmospheric environments and for time periods that are conducive to the formation of secondary $PM_{2.5}$ and ozone. In the *MERPs Guidance*, the U.S. EPA presents photochemical modeling of hypothetical single source impacts on downwind secondary $PM_{2.5}$ and ozone in the following four regional domains with varying source release types (either "high" or "low") and varying NO_X, SO_2, and VOC emission rates (either 500, 1,000, or 3,000 tpy):

- central U.S. = 12EUS2 domain;
- western U.S. = 12WUS1 domain;
- eastern U.S. = 12EUS3 domain; and
- contiguous U.S. = 12US2 domain.[9]

Specifically, the highest daily maximum 8-hour ozone impacts, highest daily 24-hour $PM_{2.5}$ impacts, and highest annual average $PM_{2.5}$ impacts for all hypothetical industrial sources in these four modeling domains are presented for use in PSD ambient impacts determinations.[10] Note, the U.S. EPA developed the MERPs View Qlik webpage after publishing the *MERPs Guidance*.[11] This webpage includes additional hypothetical sources compared to the *MERPs Guidance*. CP Express examined the webpage to identify potential hypothetical sources for use in this analysis.

To use the U.S. EPA MERPs hypothetical sources in a PSD secondary impacts determination, the U.S. EPA recommends the following three-step process as also displayed in Figure 1-2 (from Figure 4-1, pg. 42, in the *MERPs Guidance*):[12]

- **Step 1**: *Identify a representative hypothetical source (or group of sources for an area) from EPA's modeling as detailed in Appendix Table A-1 or the Excel spreadsheet available on SCRAM.[13] If a representative hypothetical source is not available, then consider whether an EPA derived MERP value available for the broader geographic area of the project source may be adequately representative and thus appropriate to use (see Table 4-1). Alternatively, one can consider conducting photochemical modeling (as described in Section 3.2.2) to derive appropriate information to derive a source- or area-specific value.*

- *The permit applicant should provide the appropriate permitting authority with a technically credible justification that the source characteristics (e.g., stack height, emissions rate) of the specific project source described in a permit application and the chemical and physical environment (e.g., meteorology, background pollutant concentrations, and regional/local emissions) near that project source are adequately represented by the selected hypothetical source(s).*

- **Step 2**: *Acquire the source characteristics and associated modeling results for the hypothetical source(s). If using EPA modeling, then access these data from the on-line spreadsheet on EPA's SCRAM website.[14] If using other modeling, then access these data from the relevant input and output files.*

- **Step 3**: *Apply the source characteristics and photochemical modeling results from Step 2 to the MERP equation with the appropriate SIL value to assess the project source impacts.*

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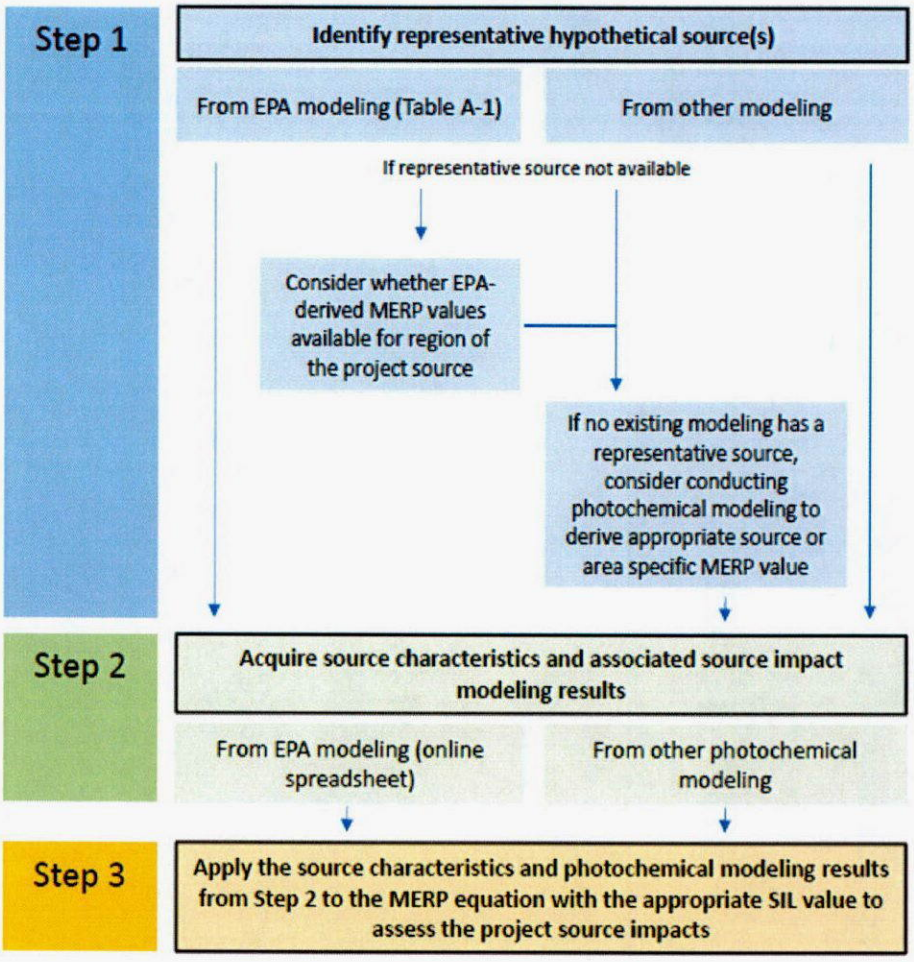
[9] *MERPs Guidance*, pg. 67.
[10] *MERPs Guidance*, pg. 19.
[11] U.S. EPA MERPs View Qlik interactive website. Available at: https://www.epa.gov/scram/merps-view-qlik. Accessed July 2022.
[12] *MERPs Guidance*, pg. 40.
[13] Also examine the U.S. EPA MERPs View Qlik interactive website.
[14] *Ibid.*

Section 4.1 provides several example PSD permit application scenarios that illustrate how to use source characteristics and photochemical modeling results to derive a MERP Tier 1 demonstration tool. ...where project sources are required to assess multiple precursors, EPA recommends that the project source impacts on O_3 or secondary $PM_{2.5}$ reflect the sum of air quality changes resulting from each of those precursors for comparison to the EPA recommended SIL. Further, where project sources are required to assess both primary $PM_{2.5}$ and precursors of secondary $PM_{2.5}$, EPA recommends that applicants combine the primary and secondary impacts to determine total $PM_{2.5}$ impacts as part of the PSD compliance demonstration. In such cases, the project source impacts associated with their direct $PM_{2.5}$ emissions should be assessed through dispersion modeling.

Figure 1-2. U.S. EPA Recommended Multi-step Process for use of MERPs in PSD Compliance Demonstrations

(Figure 4-1, pg. 42, in the *MERPs Guidance*)



1.2 Selection of U.S. EPA Hypothetical Source

To begin **Step 1**, CP Express examined the available U.S. EPA hypothetical sources from the *MERPs Guidance*. Figure 1-3 shows the twenty-five hypothetical sources in the U.S. EPA central U.S. modeling domain (from Figure A-2, pg. 69, in the *MERPs Guidance*) with the Moss Lake Compressor Station location indicated using a red arrow. For reference, in the contiguous U.S. modeling domain, there are no hypothetical sources located in Louisiana or in the Gulf Coast region (refer to Figure A-4, pg. 71, in the

MERPs Guidance). The closest hypothetical source to the Moss Lake Compressor Station is the central U.S. domain (CUSD) hypothetical source 15 (i.e., Louisiana-Acadia FIPS #22001),[15] which is located approximately 79 km to the northeast of the Moss Lake Compressor Station's center. CP Express presents a comparison of this U.S. EPA Louisiana-Acadia hypothetical source to the Moss Lake Compressor Station below to determine if the U.S. EPA-established MERPs for this hypothetical source are representative to use in this PSD secondary $PM_{2.5}$ and ozone impacts determination.[16] Note, CP Express also examined available hypothetical sources on the U.S. EPA MERPs View Qlik webpage to ensure the U.S. EPA has not added any new hypothetical sources in the area.[17] Based on the review, the Louisiana-Acadia hypothetical source remains the closest to the Moss Lake Compressor Station.

The U.S. EPA instructs the applicant to describe how the existing modeling for the selected hypothetical source reflects the formation of secondary $PM_{2.5}$ and ozone in the geographic area of the PSD project.[18] Further, the U.S. EPA provides examples of factors that may be used to describe the comparability of the two different geographic areas (i.e., PSD project area and modeled hypothetical source area) as follows:[19]

- Average and peak temperatures;
- Humidity;
- Terrain;
- Rural or urban nature of the area;
- Nearby local and regional sources of pollutants and their emissions (e.g., other industry, mobile, biogenic); and
- Ambient concentrations of relevant pollutants where available.

Table 1-1 provides a comparison of U.S. EPA's Louisiana-Acadia hypothetical source to the Moss Lake Compressor Station using the factors provided above. The two locations are relatively close (~79 km) and have similar elevation and terrain (very flat). The monthly average mean and maximum temperature values are within ~1°F during peak ozone production months (May and August). Both the Moss Lake Compressor Station and U.S. EPA Louisiana-Acadia hypothetical source are located in rural environments with similar landuse/landcover. The ozone design values listed for the ambient monitors near each location are within 1 ppb and below the 70 ppb 8-hour ozone NAAQS.[20] Further, the 24-hour $PM_{2.5}$ design values are within 3 $\mu g/m^3$ (both below the 35 $\mu g/m^3$ NAAQS), and the annual $PM_{2.5}$ design values are within 0.8 $\mu g/m^3$ (both below the 12 $\mu g/m^3$ NAAQS). For these reasons, the U.S. EPA empirical relationships derived for the Louisiana-Acadia hypothetical source were utilized in this analysis. The next two sections provide the Class II ozone impacts analysis for NAAQS purposes and Class II annual and 24-hour $PM_{2.5}$ impacts analysis for NAAQS purposes.

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[15] *MERPs Guidance*, pg. 65.

[16] Note a comparison to the most conservative (lowest) MERP value by climate region is not presented in this analysis because the proposed 323.45 tpy NO_X emissions in this application is greater than the lowest (i.e., most conservative) South Climate Zone 190 tpy MERP value for 8-hour ozone (refer to Table 4-1, pg. 43, in the *MERPs Guidance*).

[17] U.S. EPA MERPs View Qlik interactive website. Available at: https://www.epa.gov/scram/merps-view-qlik. Accessed July 2022.

[18] *MERPs Guidance*, pg. 9.

[19] *MERPs Guidance*, pg. 9.

[20] A comparison of NO_2 design values is not presented in Table 1-1 because the region only has one NO_2 ambient monitor: Westlake, which leaves no reason to compare between the U.S. EPA Louisiana-Acadia hypothetical source and the Moss Lake Compressor Station. Information above from the "Table6b. Site Trends 1-hour" tab from the U.S. EPA *2021 Nitrogen Dioxide Design Values Report* Microsoft Excel file. Available at: https://www.epa.gov/air-trends/air-quality-design-values. Accessed July 2022.

Figure 1-3. Locations of Central U.S. Domain (CUSD) Hypothetical Sources and Moss Lake Compressor Station

(Figure A-2, pg. 69, in the *MERPs Guidance*)

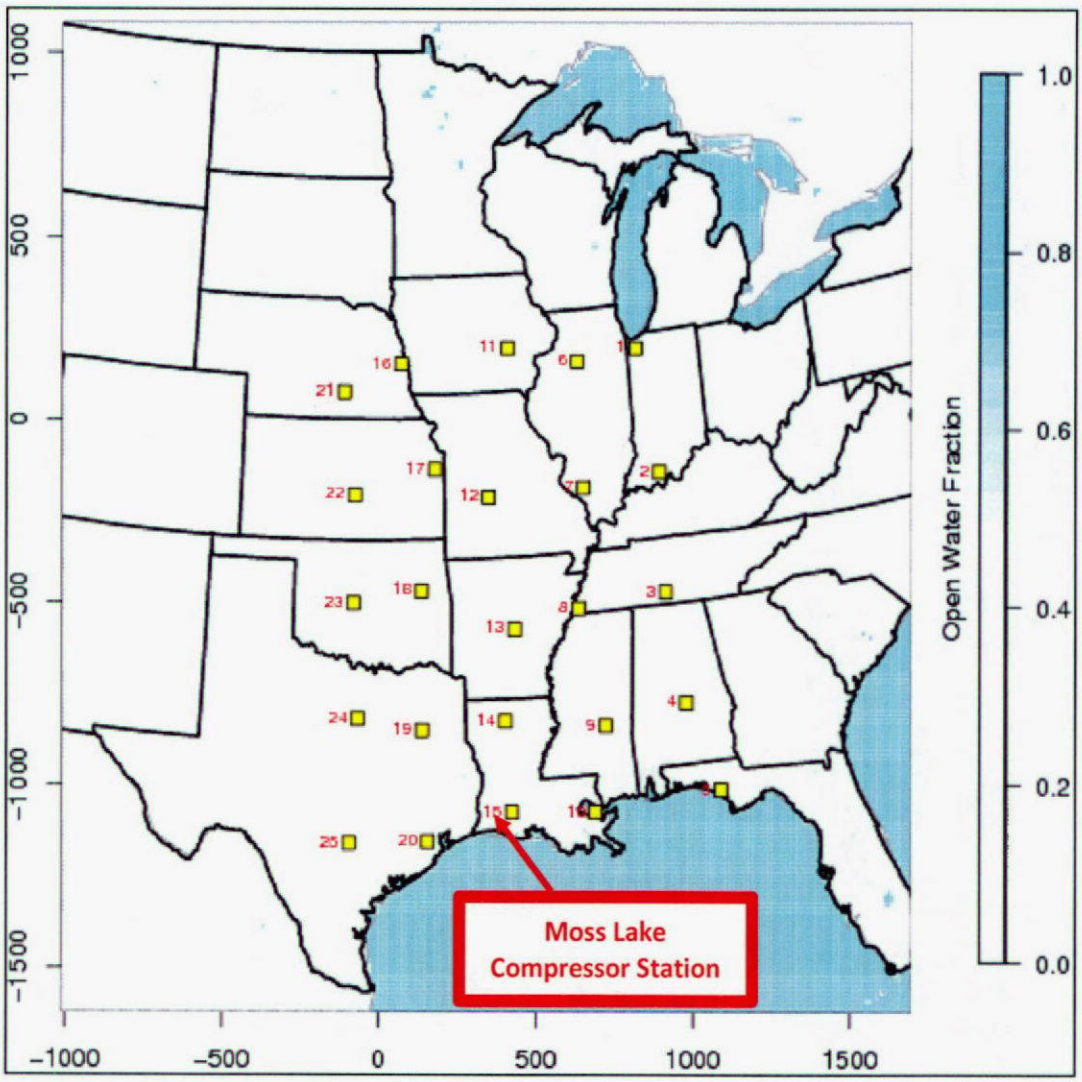

Table 1-1. Comparison of U.S. EPA Louisiana-Acadia Hypothetical Source to the Moss Lake Compressor Station

Parameters	Moss Lake Compressor Station	U.S. EPA Louisiana-Acadia Hypothetical Source (FIPS #22001)
Latitude, Longitude	30.091°, -93.420° [7]	30.241°, -92.616° [1]
County/Parish	Calcasieu	Acadia [1]
Distance to Moss Lake Compressor Station (km) [4]	-	~79
Elevation (m) [4]	~1	~4
Terrain [4]	Flat	Flat
May Monthly Average Mean Temperature (°F) [2]	75.9	74.9
August Monthly Average Mean Temperature (°F) [2]	83.4	82.2
May Monthly Average Maximum Temperature (°F) [2]	84.9	84
August Monthly Average Maximum Temperature (°F) [2]	92.2	91.2
Humidity [6]	High	High
Rural/Urban Nature of the Area [3]	Rural area (shrubland/grassland); surrounded by grassland; industry visible within 15 km	Rural area (heavily wooded); with small town ~3 km to southwest; minimal industry visible within 15 km
Nearby Local and Regional Sources of Pollutants [4]	Nearby: industry Regional: industry/biogenic/mobile	Nearby: residential Regional: industry/biogenic/mobile
2019-2021 8-hour Ozone NAAQS Design Value (ppb) [5]	61	60
2019-2021 24-hour $PM_{2.5}$ NAAQS Design Value ($\mu g/m^3$) [8]	17	20
2019-2021 Annual $PM_{2.5}$ NAAQS Design Value ($\mu g/m^3$) [8]	7.1	7.9

[1] Latitude, longitude, and county/parish of U.S. EPA Louisiana-Acadia hypothetical source from the pg. 65 of the *MERPs Guidance*.

[2] Temperature data from nearest meteorological station (Lake Charles Regional Airport Station (ID 3937; 30.12472°N, 93.22833°W) for the Moss Lake Compressor Station and Jennings Station (ID 164700; 30.2002°N, 92.6641°W) for U.S. EPA Louisiana-Acadia hypothetical source) using the Southern Regional Climate Center NOWData. Available at: https://www.srcc.tamu.edu/services/nowdata/. Accessed July 2022. Climate Information Data Portal "monthly times series" product that represents an average of at least thirty years of temperature data.

[3] Determined using Google Earth satellite imagery and USGS National Gap Analysis Program Land Cover Data Viewer. Available at: https://www.usgs.gov/core-science-systems/science-analytics-and-synthesis/gap/science/introduction-land-cover-viewer?qt-science_center_objects=0#qt-science_center_objects. Accessed July 2022.

[4] Determined using Google Earth.

[5] Information extracted from the "Table 6. Monitor Trends" tab of the U.S. EPA *2021 Ozone Design Values Report* Microsoft Excel file. Available at: https://www.epa.gov/air-trends/air-quality-design-values. Accessed July 2022. Ozone design values from nearest/representative ambient monitor: AQS Site ID 220190002 - Carlyss for the Moss Lake Compressor Station (~7 km to northeast) and AQS Site ID 220550007 - Lafayette/Usgs for the U.S. EPA Louisiana-Acadia hypothetical source (~55 km to east).

[6] Numerical humidity values not listed because both the U.S. EPA Louisiana-Acadia hypothetical source and Moss Lake Compressor Station are in close proximity to the Gulf of Mexico as determined using Google Earth. So, humidity is high at both locations.

[7] Approximate center point of facility.

[8] Information extracted from the "Table 6b, 24hr Site DV History" tab (24-hour) and "Table 6a, Ann Site DV History" tab (annual) of the U.S. EPA *2021 $PM_{2.5}$ Design Values Report* Microsoft Excel file. Available at: https://www.epa.gov/air-trends/air-quality-design-values. Accessed July 2022. $PM_{2.5}$ design values from nearest/representative ambient monitor: AQS Site ID 220190009 - Vinton for the Moss Lake Compressor Station (~22 km to northwest) and AQS Site ID 220550007 - Lafayette/Usgs for the U.S. EPA Louisiana-Acadia hypothetical source (~55 km to east).

1.3 CLASS II OZONE IMPACTS ANALYSIS FOR NAAQS PURPOSES

To begin **Step 2** of the U.S. EPA three-step process for determining ozone impacts, CP Express developed MERPs in accordance with Equation 1 provided in the *MERPs Guidance*:[21]

$$\textbf{Equation 1: } MERP = Appropriate\ SIL\ Value \times \left(\frac{Modeled\ Emission\ Rate\ from\ Hypothetical\ Source}{Modeled\ Air\ Quality\ Impact\ from\ Hypothetical\ Source}\right)$$

Note that the critical air quality threshold for ozone (8-hour averaging period) in the equation above is 1.0 part per billion (ppb) based on the U.S. EPA finalized significant impact level (SIL).[22] For situations where project sources are required to assess multiple precursors of ozone, the U.S. EPA recommends that the impacts of multiple precursors should be estimated in a combined manner for comparison to the appropriate SIL such that the sum of precursor impacts would be lower than the SIL in a demonstration of compliance.[23] For ozone, the NO_X and VOC precursor contributions to 8-hour daily maximum ozone were considered together based on Equation 1 above to determine if Moss Lake Compressor Station's air quality impact would exceed the critical air quality threshold in accordance with the procedure outlined in the *MERPs Guidance*.

In accordance with the *MERPs Guidance*, CP Express derived equations to estimate the impact of the proposed emissions on ozone based on the data provided for the U.S. EPA Louisiana-Acadia hypothetical source. To develop the equations, CP Express reviewed the eight U.S. EPA Louisiana-Acadia hypothetical source model simulations (i.e., different emission and stack height scenarios for NO_X and VOC) provided in the U.S. EPA MERPs View Qlik interactive website as listed in Table 1-2.[24] Based on the proposed emissions of 323.45 tpy NO_X and 144.86 tpy VOC in this application, CP Express selected simulations 2 and 5 (500 tpy NO_X and 500 tpy VOC) from Table 1-2 below as the most representative U.S. EPA modeling simulations to estimate the impact on ozone.

Below are the equations the U.S. EPA used to calculate the resulting NO_X and VOC MERPs for the U.S. EPA Louisiana-Acadia hypothetical source as also displayed in Table 1-2 (note, due to downward rounding of 0.114 ppb, the VOC MERP appears erroneously high) using Equation 1:

$$NO_X\ to\ 8-hr\ O_3\ MERP\ for\ Louisiana-Acadia\ hypothetical\ source\ (tpy) = 1.0\ ppb \times \left(\frac{500\ tpy}{2.512\ ppb}\right) = 199\ tpy$$

$$VOC\ to\ 8-hr\ O_3\ MERP\ for\ Louisiana-Acadia\ hypothetical\ source\ (tpy) = 1.0\ ppb \times \left(\frac{500\ tpy}{0.114\ ppb}\right) = 4{,}386\ tpy$$

[21] *MERPs Guidance*, pgs. 6 and 18.
[22] U.S. EPA, *Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program* (April 17, 2018).
[23] *MERPs Guidance*, pg. 44.
[24] U.S. EPA MERPs View Qlik interactive website. Available at: https://www.epa.gov/scram/merps-view-qlik. Accessed July 2022.

Table 1-2. U.S. EPA Louisiana-Acadia Hypothetical Source Ozone Model Simulations listed in the MERPs Guidance

Precursor[1]	Model Simulation	Emissions Modeled[1] (tpy)	Stack Height [1], [2] (m)	Maximum Ozone Impact [1] (ppb)	MERP[1] (tpy)
NO_x	1	500	10	2.533	197
	2	500	90	2.512	199
	3	1,000	90	4.582	218
	4	3,000	90	10.520	285
VOC	5	500	10	0.114	4,378
	6	1,000	10	0.247	4,050
	7	1,000	90	0.222	4,502
	8	3,000	90	0.992	3,024

[1] Information from this table was extracted from the U.S. EPA MERPs View Qlik interactive website. Available at: https://www.epa.gov/scram/merps-view-qlik. Accessed July 2022. **Bold** text represents the simulations utilized in this analysis (i.e., simulations 3 and 5).

[2] A stack height of 10 m refers to source release type "Low" representing surface level emissions releases, and a stack height of 90 m refers to source release type "High" representing tall stack emissions releases per pg. 20 of the *MERPs Guidance*.

For **Step 3** of the U.S. EPA three-step process, CP Express considered the NO_X and VOC precursor impacts on 8-hour daily maximum ozone together to determine if the project source's air quality impact would exceed the ozone SIL as described above. The Moss Lake Compressor Station NO_X and VOC emissions are expressed as a percent of the MERP for each precursor and then the percentages are summed. As such, the above U.S. EPA Louisiana-Acadia hypothetical source MERPs of 199 tpy NO_X and 4,378 tpy VOC were considered together in combination with the proposed Moss Lake Compressor Station 323.45 tpy NO_X and 144.86 tpy VOC emissions to determine the combined impacts on ozone. A value less than 100% indicates that the U.S. EPA recommended 8-hour ozone SIL will not be exceeded when considering the combined impacts of these precursors on 8-hour daily maximum ozone.[25] Utilizing example Scenario A on pg. 45 and example Scenario C on pg. 47 of the *MERPs Guidance*, CP Express calculated 166% combined for NO_X and VOC:

$$\left(\left(\frac{323.45\ tpy\ NOx\ from\ Moss\ Lake\ Comp.St}{199\ tpy\ NOx\ 8-hr\ daily\ maximum\ O_3\ MERP}\right)+\left(\frac{144.86\ tpy\ VOC\ from\ Moss\ Lake\ Comp.St}{4{,}378\ tpy\ VOC\ 8-hr\ daily\ maximum\ O_3\ MERP}\right)\right)\times 100 = 166\%$$

Based on the calculation above, the combined impact of Moss Lake Compressor Station's proposed ozone precursor NO_X and VOC emissions does exceed the critical air quality threshold for ozone based on representative U.S. EPA modeling for the Louisiana-Acadia hypothetical source from the *MERPs Guidance*. Given that the emissions from this Moss Lake Compressor Station are expected to have air quality impacts that exceed the ozone SIL, a cumulative impact analysis is the next step as illustrated in Figure 1-1 (as also stated for example Scenario C on pg. 48 of the *MERPs Guidance*).

Regarding the **cumulative impact analysis**, the U.S. EPA states the following in the *MERPs Guidance*:[26]

> *As detailed in Section 9 of the Guideline, for situations where the project source is not able to demonstrate compliance through the source impact analysis, a cumulative impact analysis can be conducted that accounts for the impacts from the project source, impacts from nearby sources (as appropriate), and monitored background levels.The cumulative impacts are then compared to the NAAQS to determine whether the project source could cause or contribute to a NAAQS exceedance.*

[25] *MERPs Guidance*, pg. 45.
[26] *MERPs Guidance*, pg. 54.

The U.S. EPA rearranges the MERP equation (Equation 1 from above) such that instead of calculating a modeled emission rate based on a critical air quality threshold such as a SIL value, a project specific impact based on the proration of the project emissions by the ratio of the hypothetical source air quality impact to the hypothetical source emissions is estimated.[27] The resulting Equation 2 below calculates the project source impact using the product of the relevant hypothetical source air quality impact relative to emissions scaled either upwards or downwards to the emission rate of the project:[28]

$$\textbf{Equation 2: } Project\ Impact = Project\ Emission\ Rate \times \left(\frac{Modeled\ Air\ Quality\ Impact\ from\ Hypothetical\ Source}{Modeled\ Emission\ Rate\ from\ Hypothetical\ Source}\right)$$

Utilizing Equation 2 above for both NO_X and VOC air quality impacts and as outlined in example Scenario B on pg. 58 of the *MERPs Guidance*, CP Express calculated a total project impact of 1.6580 ppb ozone:

$$NOx\ Project\ Impact: 323.45\ tpy\ Moss\ Lake\ Comp.St \times \left(\frac{2.512\ ppb\ from\ Louisiana - Acadia\ hypothetical\ source}{500\ tpy\ from\ Louisiana - Acadia\ hypothetical\ source}\right) = 1.6250\ ppb\ ozone$$

$$VOC\ Project\ Impact: 144.86\ tpy\ Moss\ Lake\ Comp.St \times \left(\frac{0.114\ ppb\ from\ Louisiana - Acadia\ hypothetical\ source}{500\ tpy\ from\ Louisiana - Acadia\ hypothetical\ source}\right) = 0.0330\ ppb\ ozone$$

$$Total\ Project\ Impact: 1.6250\ ppb + 0.0330\ ppb = 1.6580\ ppb\ ozone$$

As stated in the *MERPs Guidance* (and in example Scenario B on pg. 59 of the *MERPs Guidance*), for simplicity, nearby and background levels are represented by the design value from a representative monitor.[29] As a result, the cumulative assessment includes the sum of Equation 2 (1.6580 ppb ozone as calculated above) and that monitored design value as displayed in Equation 3 below.[30]

$$\textbf{Equation 3: } Projected\ Design\ Value\ with\ Project = Project\ Impact\ (i.e., Equation\ 2) + Monitored\ Design\ Value$$

To determine a representative monitor, CP Express examined all ambient ozone monitors in close proximity to the Moss Lake Compressor Station as provided in the U.S. EPA *2021 Ozone Design Values Report* – Table 6. Monitor Trends and as displayed in Table 1-3 below.[31] These six ambient ozone monitors are also displayed in Figure 1-4. The closest monitors to the Moss Lake Compressor Station are as follows: Carlyss (~7 km), Vinton (~22 km), West Orange (~33 km), SETRPC 43 Jefferson Co Airport (~58 km), Port Arthur West (~59 km), and SETRPC 40 Sabine Pass (~61 km). Based on its rural landuse/landcover (displayed in Figure 1-4) and proximity, the Carlyss monitor was selected as a representative ozone ambient monitor for use in this cumulative impact analysis.

Substituting the 1.6580 ppb project impact on ambient ozone and 61 ppb Carlyss ambient monitor 2019-2021 ozone design value into Equation 3 (using example Scenario B on pg. 59 of the *MERPs Guidance*), CP Express calculated a projected ozone design value with the Moss Lake Compressor Station proposed NO_X and VOC emissions of 62.6580 ppb:

$$Projected\ Ozone\ Design\ Value\ with\ Project: 1.6580\ ppb\ project\ impact + 61\ ppb\ monitor\ design\ value = 62.6580\ ppb$$

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[27] *MERPs Guidance*, pg. 55.
[28] *MERPs Guidance*, pg. 55.
[29] *MERPs Guidance*, pg. 55.
[30] *MERPs Guidance*, pg. 55.
[31] U.S. EPA, *2021 Ozone Design Values Report*, Microsoft Excel file. Available at: https://www.epa.gov/air-trends/air-quality-design-values. Accessed July 2022.

The 62.6580 ppb value calculated above represents the proposed Moss Lake Compressor Station's impact combined with the nearby monitor design value. This projected ozone design value of 62.6580 ppb is below the 70 ppb 8-hour ozone NAAQS indicating there is no NAAQS ozone violation for which the proposed Moss Lake Compressor Station could cause or contribute to.[32] Therefore, no further analysis is necessary.

Table 1-3. Ozone Ambient Monitors near the Moss Lake Compressor Station [1]

AQS Site ID	Local Site Name	Site Latitude (°)	Site Longitude (°)	2019-2021 Ozone Design Value[2] (ppb)	Distance to Moss Lake Compressor Station (km)
220190002	Carlyss	30.140265	-93.368448	61	~7
482450101	SETRPC 40 Sabine Pass	29.727931	-93.894081	66	~61
220190009	Vinton	30.227798	-93.579965	63	~22
482450011	Port Arthur West	29.897516	-93.991084	62	~59
483611001	West Orange	30.085263	-93.761341	62	~33
482450102	SETRPC 43 Jefferson Co Airport	29.942500	-94.000556	66	~58

[1] Information obtained from the *Interactive Map of Air Quality Monitors.* Available at: https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors. Accessed July 2022.

[2] U.S. EPA, 2021 Ozone Design Values Report, Microsoft Excel file. Available at: https://www.epa.gov/air-trends/air-quality-design-values. Accessed July 2022. For AQS Site ID: 482450101, 2019-2021 design value is not available. Therefore, the 2018-2020 design value is listed instead of 2019-2021 design value.

[32] *MERPs Guidance*, pg. 55.

Figure 1-4. Locations of Six Ambient Ozone Monitors and Moss Lake Compressor Station using Google Earth Imagery

1.4 CLASS II $PM_{2.5}$ IMPACTS ANALYSIS FOR NAAQS PURPOSES

The critical air quality threshold for 24-hour and annual $PM_{2.5}$ in Equation 1 above is 1.2 µg/m^3 and 0.2 µg/m^3, respectively, based on the U.S. EPA finalized SILs.[33] Section 5.1 of Appendix G (i.e., Air Quality Dispersion Modeling Report) of this permit application shows the primary $PM_{2.5}$ 24-hour AERMOD-modeled concentrations exceed SIL. As a result, this analysis must complete the cumulative impact analysis as illustrated in Figure 1-1 (as also stated for example Scenario B on pg. 60 of the *MERPs Guidance*). Additionally, the contributions of the $PM_{2.5}$ nitrate ion from NO_X emissions and $PM_{2.5}$ sulfate ion from SO_2 emissions to annual and 24-hour secondary $PM_{2.5}$ formation are considered together.

In accordance with the *MERPs Guidance*, CP Express derived equations to estimate the impact of the proposed emissions on secondary $PM_{2.5}$ based on the data provided for the U.S. EPA Louisiana-Acadia hypothetical source. To develop the equations, CP Express reviewed the twenty U.S. EPA Louisiana-Acadia hypothetical source model simulations (i.e., different averaging periods, emission, and stack height scenarios for NO_x and SO_2) provided in the U.S. EPA MERPs View Qlik interactive website as listed in Table

[33] U.S. EPA, *Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program* (April 17, 2018).

1-4.[34] Based on the proposed emissions of 323.45 tpy NO_x and 3.80 tpy SO_2 and associated elevated stack height releases, CP Express selected simulations 2 and 7 for both annual and 24-hour averaging periods from Table 1-4 below as the most representative U.S. EPA modeling simulations to estimate the impact on secondary $PM_{2.5}$.

Table 1-4. U.S. EPA Louisiana-Acadia Hypothetical Source Secondary $PM_{2.5}$ Model Simulations listed in the *MERPs Guidance*

Averaging Period	Precursor [1]	Model Simulation	Emissions Modeled [1] (tpy)	Stack Height [1], [2] (m)	Maximum Secondary $PM_{2.5}$ Impact [1] ($\mu g/m^3$)	MERP [1] (tpy)
Annual	SO_2	1	500	10	0.04012	2,492
		2	**500**	**90**	**0.01194**	**8,375**
		3	1,000	10	0.11227	1,781
		4	1,000	90	0.02636	7,586
		5	3,000	90	0.12003	4,999
	NO_x	6	500	10	0.01265	7,907
		7	**500**	**90**	**0.00241**	**41,426**
		8	1,000	10	0.02683	7,453
		9	1,000	90	0.00529	37,812
		10	3,000	90	0.01962	30,575
24-hour	SO_2	1	500	10	1.84092	326
		2	**500**	**90**	**0.39243**	**1,529**
		3	1,000	10	4.37306	2,74
		4	1,000	90	1.08091	1,110
		5	3,000	90	4.08097	882
	NO_x	6	500	10	0.18836	3,185
		7	**500**	**90**	**0.07251**	**8,275**
		8	1,000	10	0.38701	3,101
		9	1,000	90	0.16345	7,342
		10	3,000	90	0.53327	6,751

[1] Information from this table was extracted from the U.S. EPA MERPs View Qlik interactive website. Available at: https://www.epa.gov/scram/merps-view-qlik. Accessed July 2022. **Bold** text represents the simulations utilized in this analysis (i.e., simulations 2 and 7 for both annual and 24-hour averaging periods).

[2] A stack height of 10 m refers to source release type "Low" representing surface level emissions releases, and a stack height of 90 m refers to source release type "High" representing tall stack emissions releases per pg. 20 of the *MERPs Guidance.*

Utilizing Equation 2 above for both NO_X ($PM_{2.5}$ nitrate ion) and SO_2 ($PM_{2.5}$ sulfate ion) air quality impacts and as outlined in example Scenario B on pg. 60 of the *MERPs Guidance*, CP Express calculated a total project impact of 0.0017 $\mu g/m^3$ annual secondary $PM_{2.5}$ and 0.0499 $\mu g/m^3$ 24-hour secondary $PM_{2.5}$:

Annual:

$$NOx\ Project\ Impact\text{: } 323.45\ tpy\ Moss\ Lake\ Comp.\ St \times \left(\frac{0.00241\ \mu g/m^3\ from\ Louisiana - Acadia\ hypothetical\ source}{500\ tpy\ from\ Louisiana - Acadia\ hypothetical\ source}\right)$$
$$= 0.001559\ \mu g/m^3\ PM_{2.5}$$

$$SO_2\ Project\ Impact\text{: } 3.80\ tpy\ Moss\ Lake\ Comp.\ St \times \left(\frac{0.01194\ \mu g/m^3\ from\ Louisiana - Acadia\ hypothetical\ source}{500\ tpy\ from\ Louisiana - Acadia\ hypothetical\ source}\right)$$
$$= 0.000091\ \mu g/m^3\ PM_{2.5}$$

[34] U.S. EPA MERPs View Qlik interactive website. Available at: https://www.epa.gov/scram/merps-view-qlik. Accessed July 2022.

$$Total\ Project\ Impact\text{: } 0.001559\ \mu g/m^3 + 0.000091\ \mu g/m^3 = \ 0.0017\ \mu g/m^3 \textbf{annual}\ secondary\ PM_{2.5}$$

24-hour:

$$NOx\ Project\ Impact\text{: } 323.45\ tpy\ oss\ Lake\ Comp.St \times \left(\frac{0.07251\ \mu g/m^3\ from\ Louisiana - Acadia\ hypothetical\ source}{500\ tpy\ from\ Louisiana - Acadia\ hypothetical\ source}\right) = \ 0.0469\ \mu g/m^3\ PM_{2.5}$$

$$SO_2\ Project\ Impact\text{: } 3.80\ tpy\ oss\ Lake\ Comp.St \times \left(\frac{0.39243\ \mu g/m^3\ from\ Louisiana - Acadia\ hypothetical\ source}{500\ tpy\ from\ Louisiana - Acadia\ hypothetical\ source}\right) = \ 0.0030\ \mu g/m^3\ PM_{2.5}$$

$$Total\ Project\ Impact\text{: } 0.0469\ \mu g/m^3 + 0.0030\ \mu g/m^3 = \ 0.0499\ \mu g/m^3\ \textbf{24} - \textbf{hour}\ secondary\ PM_{2.5}$$

To determine the cumulative impacts, the total project secondary $PM_{2.5}$ impact calculated above is combined with the primary $PM_{2.5}$ AERMOD-modeled concentration and a representative ambient $PM_{2.5}$ monitor design value:

Equation 4: $Projected\ Design\ Value\ with\ Project =$

$$Project\ Secondary\ Impact + Project\ Primary\ Impact\ (AERMOD) + \ Monitored\ Design\ Value$$

Section 5.1 and 5.2 of Appendix G (i.e., Class II Air Quality Dispersion Modeling Report) of this permit application lists 0.11 (< SIL, therefore no cumulative impacts is required) and 27.10 µg/m³ (based on NAAQS modeling analysis, which includes off-property emission sources in addition to the emission sources from the proposed Moss Lake Compressor Station) as the annual and 24-hour primary $PM_{2.5}$ AERMOD-modeled concentrations, respectively. The 24-hour ambient $PM_{2.5}$ monitor design value is 17.3 µg/m³. Substituting these values into Equation 4 results in the following:

Annual:

$$Projected\ Design\ Value\ with\ Project = 0.0017\ \mu g/m^3 + 0.11\ \mu g/m^3 = 0.1\ \mu g/m^3$$

24-hour:

$$Projected\ Design\ Value\ with\ Project = 0.0499\ \mu g/m^3 + 27.10\ \mu g/m^3 + \ 17.3\ \mu g/m^3 = 44.5\ \mu g/m^3$$

The results above show the proposed Moss Lake Compressor Station's primary and secondary $PM_{2.5}$ annual impact is below the annual 0.2 µg/m³ SIL. Additionally, the results above show the proposed Moss Lake Compressor Station's primary and secondary $PM_{2.5}$ 24-hour impact combined with the nearby monitor 24-hour design value is above the NAAQS (35 µg/m³). However, the culpability analysis demonstrates that when and where a modeled NAAQS exceedance occurs, Moss Lake Compressor Station's maximum contribution is 0.18 (primary + secondary) µg/m³ which is below the significant level of 1.2 µg/m³. These results indicate that the proposed Moss Lake Compressor Station will not cause or contribute to any violation of annual or 24-hr $PM_{2.5}$ standards.[35] Therefore, no further analysis is necessary.

[35] *MERPs Guidance*, pg. 55.