State of Utah

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Governor

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Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-AN159380002-23

December 11, 2023

Kaylene Bridwell
Uinta Wax Operating, LLC
5128 Apache Plume Road, Suite 300
Fort Worth, TX 76109
kaylene.bridwell@uintawax.com

Dear Ms. Bridwell:

Re: Approval Order: Administrative Amendment to Approval Order DAQE-AN159380001-19 to Remove Existing Equipment, Add New Equipment, and Update Emissions as a Reduction in Air Pollutants
Project Number: N159380002

The attached Approval Order (AO) is issued pursuant to the Notice of Intent (NOI) received on July 8, 2022. Uinta Wax Operating, LLC must comply with the requirements of this AO, all applicable state requirements (R307), and Federal Standards.

The project engineer for this action is **Dylan Frederick**, who can be contacted at (385) 306-6529 or dfrederick@utah.gov. Future correspondence on this AO should include the engineer's name as well as the DAQE number shown on the upper right-hand corner of this letter. No public comments were received on this action.

Sincerely,

Bryce C. Bird
Director

BCB:DF:jg

cc: TriCounty Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

APPROVAL ORDER
DAQE-AN159380002-23
Administrative Amendment to Approval Order DAQE-AN159380001-19 to Remove Existing Equipment, Add New Equipment, and Update Emissions as a Reduction in Air Pollutants

Prepared By
Dylan Frederick, Engineer
(385) 306-6529
dfrederick@utah.gov

Issued to
Uinta Wax Operating, LLC - North Randlett Compressor Station

Issued On
December 11, 2023

Issued By

Bryce C. Bird
Director
Division of Air Quality

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name
Uinta Wax Operating, LLC

Source Name
Uinta Wax Operating, LLC - North Randlett Compressor Station

Mailing Address
5128 Apache Plume Road, Suite 300
Fort Worth, TX 76109

Physical Address
5 miles west of Randlett
Uintah, UT 84000

Source Contact
Name Kaylene Bridwell
Phone (405) 496-7308
Email kaylene.bridwell@uintawax.com

UTM Coordinates
593,702 m Easting
4,453,005 m Northing
Datum NAD83
UTM Zone 12

SIC code 1311 (Crude Petroleum & Natural Gas)

SOURCE INFORMATION

General Description
Uinta Wax Operating, LLC (Uinta) operates the North Randlett Compressor Station in Uintah County. Gas enters the station where it is separated from liquids in the slug catcher. Gas leaves the slug catcher and is compressed. The liquids are sent to atmospheric tanks. During compression, liquids fall out and are sent to the three-phase separator. Water and condensate from the separator is sent to atmospheric storage tanks, NGLs are sent to bullet tanks, and gas is recycled to the station inlet. Any vapors from the atmospheric tanks are controlled by combustors. The gas then enters a hydrogen sulfide (H_2S) contact tank to strip H_2S out of the gas stream. The gas then enters the Triethylene Glycol (TEG) dehydration unit where the dry gas is recycled to the station inlet or routed to a sales line. The facility will have twelve diesel storage tanks onsite for short term storage unrelated to production at the compressor station. The diesel is used for production in the area.

NSR Classification
Administrative Amendment

Source Classification
Located in Uinta Basin O3 NAA
Uintah County
Airs Source Size: B

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

NSPS (Part 60), OOOOa: Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015
MACT (Part 63), A: General Provisions
MACT (Part 63), HH: National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities
MACT (Part 63), ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Project Description
Uinta has requested that two 1,380 hp compressor engines and two 690 hp compressor engines be removed from the facility. This will leave five 1380 hp compressor engines remaining at the facility. Venting and fugitive emissions from the compressor engines have been updated to account for the removal of these engines. The number of atmospheric tanks has been reduced from eight to three. Uinta has requested the removal of the following other equipment: Two (2) Tank Heaters, EG Reboiler Heater, Two (2) Stabilizer Heaters, EG Regenerator Vent, Pneumatic Pumps, the NGL extraction process unit, and the NGL truck loading station. Uinta has also requested the addition of twelve 1,000 bbl diesel storage tanks. This addition of equipment does not result in an increase in the potential to emit of emissions for any criteria pollutant, HAP, or GHG. All emissions are decreasing at the facility. Therefore, this change is being processed as an administrative amendment under R307-401-12, Reduction in Air Pollutants.

SUMMARY OF EMISSIONS

The emissions listed below are an estimate of the total potential emissions from the source. Some rounding of emissions is possible.

Criteria Pollutant	Change (TPY)	Total (TPY)
CO_2 Equivalent	-16168	45510.00
Carbon Monoxide	-17.61	36.90
Nitrogen Oxides	-47.08	36.66
Particulate Matter - PM_{10}	-1.39	2.46
Particulate Matter - $PM_{2.5}$	-1.39	2.46
Sulfur Dioxide	-0.09	0.15
Volatile Organic Compounds	-7.18	74.86

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Acetaldehyde (CAS #75070)	-560	2100
Acrolein (CAS #107028)	-360	1300
Benzene (Including Benzene From Gasoline) (CAS #71432)	-2040	2460
Ethyl Benzene (CAS #100414)	-10	36
Formaldehyde (CAS #50000)	-2180	5600
Generic HAPs (CAS #GHAPS)	60	696
Hexane (CAS #110543)	-20	2820
Methanol (CAS #67561)	-220	620
Toluene (CAS #108883)	-80	420
Xylenes (Isomers And Mixture) (CAS #1330207)	-10	68
	Change (TPY)	**Total (TPY)**
Total HAPs	-2.71	8.06

SECTION I: GENERAL PROVISIONS

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
I.4	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
I.5	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.6	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
I.7	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]
I.8	The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-18]

SECTION II: PERMITTED EQUIPMENT

II.A THE APPROVED EQUIPMENT

II.A.1	**Uinta Wax Operating, LLC** North Randlett Compressor Station
II.A.2	**Twelve (12) Storage Tanks** Capacity: 1,000 barrels each Contents: Diesel Fuel

II.A.3	**Five (5) Compressor Engines** E1 - E5 Capacity: 1,380 hp each Fuel: Natural Gas Controls: Oxidation catalyst and AFRC Stack Height: 35 feet NSPS Applicability: Subpart JJJJ
II.A.4	**Flare** Fuel: Natural Gas Pilot Capacity: 50 scf/hr Throughput: 19 MMScf/yr
II.A.5	**Three (3) Combustors** Pilot Fuel: Natural Gas One (1) combustor to control emissions from TEG still vent vapors and pneumatic pump Two (2) combustors to control emissions from three (3) atmospheric tanks Pilot Fuel: Natural Gas
II.A.6	**Two (2) TEG Dehydration Units** Capacity: 15 MMscfd each Control: Combustor Two (2) regenerator heaters each rated at 1.0 MMBtu/hr
II.A.7	**Emergency Generator Engine** Capacity: 190.2 hp Fuel: Natural Gas Controls: Oxidation Catalyst and AFRC NSPS Applicability: Subpart JJJJ
II.A.8	**High Pressure NGL Truck Loading Station** Controls: Pressurized vapor balancing
II.A.9	**Condensate Truck Loading Operations** Control: Combustor
II.A.10	**Three (3) Atmospheric Storage Tanks** Capacity: 400 barrels each Control: Two (2) Combustors Contains: Liquids from inlet separator and scrubbers and water from separators and TEG dehydration units
II.A.11	**Two (2) Pressurized Bullet Tanks** Capacity: 50,000 gallons or less each Contains: Natural gas liquids. *Included for informational purposes only

SECTION II: SPECIAL PROVISIONS

II.B REQUIREMENTS AND LIMITATIONS

II.B.1	**Facility-Wide Requirements**
II.B.1.a	Visible emissions from the following emission points shall not exceed the following values: A. The emergency flare and three combustors - no visible emissions B. All-natural gas-operated equipment - 10% opacity C. All other points - 20% opacity. [R307-401]
II.B.1.b	Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.1.c	The owner/operator shall only use natural gas as fuel in the compressor engines, natural gas dehydrator reboiler, and site process heaters. [R307-401]
II.B.1.d	The owner/operator shall not exceed a throughput of 19 MMScf of gas flared or vented from the separator unit per rolling 12-month period. [R307-401-8]
II.B.1.d.1	The owner/operator shall: A. Determine throughput through vendor receipts or company records. B. Record throughput on a daily basis C. Use throughput data to calculate a new rolling 12-month total by the 20th day of each month using data from the previous 12 months D. Keep throughput records for all periods the flare is in operation. [R307-401-8]
II.B.1.e	The owner/operator shall not exceed 260 compressor blowdown events for all units per rolling 12-month period. [R307-401-8]
II.B.1.e.1	The owner/operator shall: A. Record blowdown events via an operator log B. Record the date of each blowdown event C. Use the operators log to calculate a new rolling 12-month total by the 20th day of each month using data from the previous 12 months D. Keep the consumption records for all periods the plant is in operation. [R307-401-8]

II.B.2	**Compressor Engine Requirements**
II.B.2.a	The owner/operator shall not emit more than the following rates from the indicated emission points: Source: 1,380 hp Compressor Engines with Oxidation Catalyst E1 - E5: **Pollutant** **lb/hr** **ppm at 15% O_2** NO_x 1.52 41 CO 1.37 61 VOC 2.13 60 [R307-401-8]
II.B.2.a.1	**Compliance Demonstration** To demonstrate compliance with the emission limitations above, the owner/operator shall perform stack testing on the emissions unit according to the stack testing conditions contained in this AO. [R307-165-2, R307-401-8]
II.B.2.a.2	**Initial Test** The owner/operator shall conduct an initial stack test on the emission unit within 180 days after startup of the emission unit. [R307-165-2]
II.B.2.a.3	**Test Frequency** The owner/operator shall conduct a stack test on the emission unit every 8,760 hours of operation or within three years after the date of the most recent stack test of the emission unit, whichever comes first. The Director may require the owner/operator to perform a stack test at any time. [40 CFR 60 Subpart JJJJ, R307-165-2, R307-401-8]
II.B.2.b	The owner/operator shall ensure the stack height for the compressor engines shall be 35 feet, as measured from the base of the stack. [R307-401-8]
II.B.3	**Stack Testing Requirements**
II.B.3.a	**The owner/operator shall conduct any stack testing required by this AO according to the following conditions**. [R307-401-8]
II.B.3.a.1	**Notification** At least 30 days prior to conducting a stack test, the owner/operator shall submit a source test protocol to the Director. The source test protocol shall include the items contained in R307-165-3. If directed by the Director, the owner/operator shall attend a pretest conference. [R307-165-3, R307-401-8]
II.B.3.a.2	**Testing & Test Conditions** The owner/operator shall conduct testing according to the approved source test protocol and according to the test conditions contained in R307-165-4. [R307-165-4, R307-401-8]
II.B.3.a.3	**Access** The owner/operator shall provide Occupational Safety and Health Administration (OSHA)- or Mine Safety and Health Administration (MSHA)-approved access to the test location. [R307-401-8]
II.B.3.a.4	**Reporting** No later than 60 days after completing a stack test, the owner/operator shall submit a written report of the results from the stack testing to the Director. The report shall include validated results and supporting information. [R307-165-5, R307-401-8]

II.B.3.a.5	**Possible Rejection of Test Results** The Director may reject stack testing results if the test did not follow the approved source test protocol or for a reason specified in R307-165-6. [R307-165-6, R307-401-8]
II.B.3.a.6	**Test Methods** When performing stack testing, the owner/operator shall use the appropriate EPA-approved test methods as acceptable to the Director. Acceptable test methods for pollutants are listed below. [R307-401-8]
II.B.3.b	**Standard Conditions** A. Temperature - 68 degrees Fahrenheit (293 K) B. Pressure - 29.92 in Hg (101.3 kPa) C. Averaging Time - As specified in the applicable test method. [40 CFR 60 Subpart A, 40 CFR 63 Subpart A, R307-401-8]
II.B.3.b.1	**NO_x** 40 CFR 60, Appendix A, Method 7; Method 7E; or other EPA-approved testing method as acceptable to the Director. [R307-401-8]
II.B.3.b.2	**VOC** 40 CFR 60, Appendix A, Method 18; Method 25; Method 25A; 40 CFR 63, Appendix A, Method 320; or other EPA-approved testing method as acceptable to the Director. [R307-401-8]
II.B.3.b.3	**CO** 40 CFR 60, Appendix A, Method 10 or other EPA-approved testing method as acceptable to the Director. [R307-401-8]
II.B.4	**Combustor/Flare Requirements**
II.B.4.a	The owner/operator shall route all exhaust gases from the TEG still vent to a combustor. [R307-401-8]
II.B.4.b	Visual determination of emissions from each combustor shall be conducted according to 40 CFR 60, Appendix A, Method 22. [R307-401-8]
II.B.4.c	The owner/operator shall not exceed a throughput of 19 MMScf of gas flared per rolling 12-month period. [R307-401-8]
II.B.4.c.1	The owner/operator shall: A. Determine throughput through vendor receipts or company records B. Record throughput on a daily basis C. Use throughput data to calculate a new rolling 12-month total by the 20th day of each month using data from the previous 12 months D. Keep throughput records for all periods the flare is in operation. [R307-401-8]
II.B.4.d	The owner/operator shall only use natural gas or plant gas as fuel for each pilot light in the combustor and the flare. [R307-401-8]

II.B.4.e	The flare and combustor shall each operate with a continuous pilot flame and be equipped with an auto-igniter. [R307-401-8]
II.B.4.f	The owner/operator shall install a flare and a combustor that are each certified to meet a VOC destruction efficiency of no less than 95%. [R307-401-8]
II.B.4.f.1	To demonstrate compliance with the VOC destruction efficiency, the owner/operator shall maintain records of the manufacturer's emissions guarantee for the installed flare and combustor. [R307-401-8]
II.B.5	**Emergency Engine Requirements**
II.B.5.a	The owner/operator shall not operate the emergency engine on site for more than 100 hours per rolling 12-month period during non-emergency situations. There is no time limit on the use of the engines during emergencies. [40 CFR 60 Subpart ZZZZ, R307-401-8]
II.B.5.a.1	To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. Records documenting the operation of each emergency engine shall be kept in a log and shall include the following: A. The date the emergency engine was used B. The duration of operation in hours C. The reason for the emergency engine usage. [40 CFR 60 Subpart ZZZZ, R307-401-8]
II.B.5.a.2	To determine the duration of operation, the owner/operator shall install a non-resettable hour meter for each emergency engine. [R307-401-8, 40 CFR 63 Subpart ZZZZ]
II.B.6	**Truck Loading Requirements**
II.B.6.a	The owner/operator shall load the atmospheric tank tanker trucks on site by the use of a vapor balancing system and vapor capture line. [R307-401-8, R307-504]
II.B.6.b	The owner/operator shall connect the vapor capture line from tanker truck to a combustor or recycle line for the atmospheric truck loading operations. [R307-401-8, R307-504]
II.B.7	**Monitor Requirements of Fugitive Emissions (Leak Detection and Repair)**
II.B.7.a	The owner/operator shall develop a fugitive emissions monitoring plan for the dehydration units, storage tanks, and flare operations. At a minimum, the plan shall include: A. Monitoring frequency B. Monitoring technique and equipment C. Procedures and timeframes for identifying and repairing leaks D. Recordkeeping practices E. Calibration and maintenance procedures. [R307-401-8]
II.B.7.a.1	The plan shall address monitoring for "difficult-to-monitor" and "unsafe-to-monitor" components. [R307-401-8]

II.B.7.b	The owner/operator shall conduct monitoring surveys on site to observe each "fugitive emissions component" for "fugitive emissions." A. "Fugitive emissions component" means any component that has the potential to emit fugitive emissions of VOC, including but not limited to valves, connectors, pressure relief devices, open-ended lines, flanges, covers and closed vent systems, thief hatches or other openings, instruments, and meters B. "Fugitive emissions" are considered any visible emissions observed using optical gas imaging or a Method 21 instrument reading of 500 ppm or greater. [R307-401-8]
II.B.7.b.1	The owner/operator shall conduct monitoring surveys according to the following schedule: A. No later than 60 days after startup or the most recent monitoring survey (whichever comes first) B. Quarterly after the initial monitoring survey. Consecutive quarterly monitoring surveys shall be conducted at least 60 days apart C. Annually after the initial monitoring survey for "difficult-to-monitor" components D. As required by the owner/operator's monitoring plan for "unsafe-to-monitor" components. [40 CFR 60 Subpart OOOOa, R307-401-8]
II.B.7.b.2	Monitoring surveys shall be conducted using one or both of the following to detect fugitive emissions: A. Optical gas imaging (OGI) equipment. OGI equipment shall be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions B. Monitoring equipment that meets U.S. EPA Method 21, 40 CFR Part 60, Appendix A. [R307-401]
II.B.7.c	The owner/operator shall repair the fugitive emissions component no later than 30 calendar days after detection. If the repair or replacement is technically infeasible, would require a vent blowdown, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next shutdown, after an unscheduled, planned or emergency vent blowdown or within 24 months, whichever is earlier. [R307-401-8]
II.B.7.c.1	The owner/operator shall resurvey the repaired or replaced fugitive emissions component no later than 30 calendar days after the fugitive emissions component was repaired. [R307-401-8]
II.B.7.d	The owner/operator shall maintain records of the fugitive emissions monitoring plan, monitoring surveys, repairs, and resurveys. [R307-401-8]

II.B.8	**Storage Tank (Storage Vessel) Requirements**
II.B.8.a	The owner/operator shall not produce more than 26,645 barrels (1 barrel = 42 gallons) of condensate per rolling 12-month period from the Compressor Station. [R307-401-8]
II.B.8.a.1	The owner/operator shall: A. Determine condensate production with process flow meters and/or sales B. Record condensate production on a daily basis C. Calculate a new 12-month total by the 20th day of each month using data from the previous 12 months D. Keep the production records for all periods the plant is in operation. [R307-401-8]
II.B.8.b	The owner/operator shall route all gases, vapors, and fumes from the condensate/oil storage tanks and produced water storage tanks on site to the operating combustor at all times after startup of production. [R307-401-8]
II.B.8.c	The owner/operator shall keep the storage tank thief hatches and other tank openings closed and sealed except during tank unloading or other maintenance activities. [R307-401-8]
II.B.8.d	The owner/operator shall inspect each closed vent system (including tank openings, thief hatches, and bypass devices) for defects that could result in air emissions at least once a month according to 40 CFR 60.5416a(c). Records of inspections shall include the date of the inspection and the results of the inspection. [R307-401-8]

PERMIT HISTORY

This Approval Order shall supersede (if a modification) or will be based on the following documents:

Supersedes	AO DAQE-AN159380001-19 dated March 28, 2019
Is Derived From	NOI dated July 25, 2022
Incorporates	Additional Information dated August 2, 2023
Incorporates	Additional Information dated September 29, 2023
Incorporates	Additional Information dated October 27, 2023
Incorporates	Additional Information dated November 8, 2023

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by Environmental Protection Agency to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent - Title 40 of the Code of Federal Regulations Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal Division of Air Quality use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - Title 40 of the Code of Federal Regulations 52.21 (b)(49)(i)
GWP	Global Warming Potential - Title 40 of the Code of Federal Regulations Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds