



## AIR PERMIT ROUTING/APPROVAL SLIP-Permits

7-25-24



AI No.	234532	Company	Mitsubishi Chemical America, Inc.	Date Received	
Activity No.	PER20220001	Facility	MCA Geimar Site	Permit Type	
CDS No.	0180-00233	Permit	0180-00233-V0	Expedited	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

<b>1. Technical Review</b>		Approved	Date rec'd	Date FW	Comments
Permit Writer		Dan		7/24/23	
Air Quality / Modeling		VPMO		7/24/23	
Toxics					
PSD/NNSR					
Technical Advisor		CW		8/21/2023	as noted.
Supervisor					
Other					
<b>2. Management Review (if PN req'd)</b>		Approved	Date rec'd	Date FW	Comments
Supervisor					
Manager					
Administrator		BDS		11/27/23	as noted
Assistant Secretary (PN)		B		11/29/23	Public hearing <input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<b>3. Response to Comments (if PN req'd)</b>		Approved	Date rec'd	Date FW	Comments
Supervisor					
Manager					
Administrator		BDS		7/18/24	as noted
Legal (BFD)					
<b>4. Final Approval</b>		Approved	Date rec'd	Date FW	Comments
Supervisor					
Manager					
Administrator		BDS		7/18/24	
Assistant Secretary		AGV		7/24/24	
<b>1. Technical Review</b>					
PN of App needed	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Date of PN of App		Newspaper	
Fee paid	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no				
NSPS applies	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	PSD/NNSR applies	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	NESHAP applies	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<b>2. Post-Technical Review</b>					
Company technical review	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a	E-mail date	7/21/23	Remarks received	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Surveillance technical review	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a	E-mail date		Remarks received	<input type="checkbox"/> yes <input type="checkbox"/> no
<b>3. Public Notice</b>					
Public Notice Required	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Initial TV			
Library					
LDEQ Website	PN Date	12/28/23	PH 2/1/24		
Company notification e-mail sent	Date e-mailed	12/20/23			
EPA PN notification e-mail sent	Date e-mailed	12/20/23			
OES PN mailout	Date mailed	12/21/23			
<b>4. Final Review</b>					
Public comments received	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	EPA comments rec'd	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		
Company comments received	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PN info entered into Permit Sec VI	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no		
Comments	11225553				

**JEFF LANDRY**  
GOVERNOR



**AURELIA S. GIACOMETTO**  
SECRETARY

**STATE OF LOUISIANA**  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL SERVICES

Certified Mail No. 7020 1290 0000 8584 8277

Agency Interest No. 234532  
Activity No.: PER20220001

Mr. Hootan Hidaji  
Mitsubishi Chemical America, Inc.  
6070 Poplar Avenue, Suite 600  
Memphis, TN 38119

RE: Part 70 Operating Permit  
Mitsubishi Chemical America, Inc. – MCA Geismar Site  
Geismar, Ascension Parish, Louisiana

Dear Mr. Hidaji:

This is to inform you that the permit for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 operating permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the 24<sup>th</sup> of July, 2029, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and Agency Interest number cited above should be referenced in future correspondence regarding this facility.

Please be advised that pursuant to provisions of the Environmental Quality Act and the Administrative Procedure Act, the Department may initiate review of a permit during its term. However, before it takes any action to modify, suspend or revoke a permit, the Department shall, in accordance with applicable statutes and regulations, notify the permittee by mail of the facts or operational conduct that warrant the intended action and provide the permittee with the opportunity to demonstrate compliance with all lawful requirements for the retention of the effective permit.

Done this 24<sup>th</sup> day of July, 2024.

Permit No.: 0180-00233-V0

Sincerely,

*Amanda Vincent*

Amanda Vincent, PhD, PMP  
Assistant Secretary

AV/DCN  
c: EPA Region 6

**AIR PERMIT BRIEFING SHEET**  
**AIR PERMITS DIVISION**  
**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Mitsubishi Chemical America, Inc. - MCA Geismar Site**  
**Agency Interest No.: 234532**  
**Geismar, Ascension Parish, Louisiana**

**I. Background**

Mitsubishi Chemical America, Inc. (MCA) proposes to construct and operate a methyl methacrylate (MMA) production facility located in Geismar, Ascension Parish, Louisiana.

**II. Origin**

A permit application dated October 21, 2022, as well as additional information dated June 28, 2023, November 1, 2023, and May 16, 2024, was submitted requesting a Part 70 operating permit.

**III. Description**

MCA proposes to construct and operate the MCA Geismar Site to produce 385,000 tons of methyl methacrylate (MMA) monomer per year. The proposed site will consist of a carbon monoxide (CO) plant, a methanol plant, a formalin plant, and an Alpha MMA plant. The site will also include product storage; wastewater treatment; miscellaneous auxiliary support facilities; and associated maintenance, startup, and shutdown activities. All major feedstocks, including ethylene, oxygen, and natural gas, will be provided to the site via pipeline.

Permitted emissions from the proposed site, in tons per year, are as follows:

Pollutant	Emissions
Particulate Matter - PM <sub>10</sub>	39.60
Particulate Matter - PM <sub>2.5</sub>	38.69
Sulfur Dioxide - SO <sub>2</sub>	1.84
Nitrogen Oxides - NO <sub>x</sub>	129.39
Carbon Monoxide - CO	521.41
Volatile Organic Compounds - VOC	69.79
Greenhouse Gas - CO <sub>2</sub> e	780,752
LAC 33:III.Chapter 51 Regulated Toxic Air Pollutants (TAPs)	
1,4-Dichlorobenzene	0.01
Benzene	0.01
Formaldehyde	0.47
Methanol	12.76
Methyl Methacrylate	3.35
n-Hexane	3.02
Naphthalene	0.01
Toluene	0.01
Ammonia	21.56
Barium (and compounds)	0.013
Cadmium (and compounds)	0.002

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Pollutant	Emissions
Chromium VI (and compounds)	0.016
Copper (and compounds)	0.001
Hydrogen Cyanide	0.01
Manganese (and compounds)	0.01
Nickel (and compounds)	0.018
Zinc (and compounds)	0.09
<b>Total TAPs</b>	<b>41.36</b>

#### **IV. Type of Review**

This application was reviewed for compliance with the Louisiana Part 70 operating permit program, Louisiana Air Quality Regulations, NESHAP, and NSPS. The facility will be a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

PM<sub>10</sub>/PM<sub>2.5</sub>, NOx, CO, VOC, and GHG emissions from the proposed facility will be more than the PSD major source threshold and/or their respective PSD significance levels. PSD analyses were performed for PM<sub>10</sub>/PM<sub>2.5</sub>, NOx, CO, VOC, and GHG emissions and are documented in Permit PSD-LA-850. Provisions of Permit PSD-LA-850 are incorporated into this Part 70 operating permit.

Pollutant	Emissions	PSD Significance Level	PSD Review?
Particulate Matter - PM <sub>10</sub>	39.60	15	Yes
Particulate Matter - PM <sub>2.5</sub>	38.69	10	Yes
Sulfur Dioxide - SO <sub>2</sub>	1.84	40	No
Nitrogen Oxides - NOx	129.39	40	Yes
Carbon Monoxide - CO	521.41	100	Yes
Volatile Organic Compounds - VOC	69.79	40	Yes
Greenhouse Gas - CO <sub>2e</sub>	780,752	75,000	Yes

The proposed MCA Geismar Site will be located in Ascension Parish; therefore, in accordance to LAC 33:III.504.M, the site is required to offset NOx and VOC emissions in excess of 50 tons/year at the ratio of 1.0 to 1. To fulfill the offset requirement, MCA utilizes 29.30 tons/year of VOC reduction credit from the paper machines shutdown at Georgia-Pacific Consumer Operations, LLC (AI 2617) and 33.28 tons/year of ozone season NOx reduction credit and 46.12 tons/year of non-ozone season NOx reduction credit from the turbine shutdown at the Dow Chemical Company's Louisiana Operations (AI 1409).

#### **V. Credible Evidence**

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule,

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62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

#### **VI. Public Notice**

In accordance with LAC 33:III.531.A.3, a notice requesting public comment on the proposed permit was published on the department's website on December 28, 2023. On December 21, 2023 copies of the public notice were mailed to the individuals who have requested to be placed on the mailing list maintained by the Office of Environmental Services (OES). The proposed permit was submitted to EPA on December 20, 2023. A public hearing was held on February 1, 2024 at the Richard Brown Community Center, 12060 Highway 73, Geismar, Louisiana 70734. Comments received during the comment period, including comments received at the public hearing, were considered prior to the permit decision. The proposed permit and SOB, along with the Public Comments Response Summary, were again submitted to EPA on May 24, 2024, in accordance with 40 CFR 70.8(a)(1)(ii) and LAC 33:III.533.B.2.b.

#### **VII. Effects on Ambient Air**

Emissions associated with the proposed facility were reviewed by LDEQ to assure compliance with the federal national ambient air quality standards (NAAQS) for criteria pollutants and Louisiana ambient air standards (AAS) for toxic air pollutants.

Dispersion Model Used: AERMOD (2022 and 2023)

Significance Analysis						
Pollutant	Averaging Period	Maximum Modeled Concentration	Significant Impact Level (SIL)	NAAQS Analysis Required	Significant Monitoring Concentration	Preconstruction Monitoring Required
PM <sub>2.5</sub> (*)	24-hour	1.09	1.2	No	-	-
	Annual	0.11	0.13	No	-	-
PM <sub>10</sub>	24-hour	2.16	5	No	-	-
	Annual	0.26	1	No	10	No
NO <sub>2</sub>	1-hour	7.45	7.5	No	-	-
	Annual	0.34	1	No	14	No
CO	1-hour	885.71	2000	No	-	-
	8-hour	457.24	500	No	575	No

\* Includes secondary PM<sub>2.5</sub>.

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Ambient Air Standard (AAS) Analysis						
Pollutant ( $\mu\text{g}/\text{m}^3$ )	Averaging Period	Maximum Modeled Concentration	AAS	Exceed AAS?	7.5% of AAS	Exceed 7.5% of AAS?
Ammonia	8-hour	34.31	640	No	48	No
Formaldehyde	Annual	0.41	7.69	No	0.58	No
Methanol	8-hour	455.68	6,240	No	468	No

**Secondary PM<sub>2.5</sub> analysis:** MCA utilized the “Guidance on the Development of Modeled Emission Rates for Precursors (MERPs)” approach to assess the impacts of the proposed facility on the secondary formation of PM<sub>2.5</sub>. The closest hypothetical source to the MCA Geismar Site is the Central U.S. Domain (CUSD) hypothetical source 10 (i.e., Louisiana-New Orleans), which is approximately 85 km to the southeast of the site. The analysis considered a hypothetical source with 500 tons/year of NOx emissions and 500 tons/year of SO<sub>2</sub> emissions to estimate the impact of NOx and SO<sub>2</sub> emissions from the MCA Geismar Site. The secondary PM<sub>2.5</sub> impacts from the site will be 0.031  $\mu\text{g}/\text{m}^3$  (daily) and 0.0006  $\mu\text{g}/\text{m}^3$  (annual).

**Ozone analysis:** MCA also utilized the MERPs approach to assess the impacts of the proposed facility on the formation of ozone. The analysis considered a hypothetical source with 500 tons/year of NOx emissions and 1000 tons/year of VOC emissions to estimate the impact of NOx and VOC emissions from the MCA Geismar Site. The total ozone impact from MCA Geismar Site will be 0.374 ppb.

### VIII. General Condition XVII Activities

Work Activity	Schedule (per year)	Emissions (tons/yr)			
		PM <sub>10</sub> /PM <sub>2.5</sub>	CO	VOC	CO <sub>2e</sub>
Relief Valve Inspection	50	-	-	0.02	-
Vessel Cleaning Activities	17	-	-	0.06	-
Compressor Maintenance	20	-	0.11	0.09	-
Filter Cleaning	500	-	-	0.50	-
Tank Vent System Maintenance	2	-	-	1.65	-
Pump Changeouts	100	-	-	0.13	-
Instrument Maintenance	2000	-	-	0.58	-
Routine Catalyst Preparation	300	< 0.01	-	< 0.01	-
Catalyst 1 Changeouts	2	-	-	0.07	-
Catalyst 2 Changeouts	1	-	-	< 0.01	-
Catalyst 3 Empty and Fill	1	0.21	-	-	-
Catalyst 4 Empty and Fill	1	0.66	-	-	-

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**Geismar, Ascension Parish, Louisiana**

Work Activity	Schedule (per year)	Emissions (tons/yr)			
		PM <sub>10</sub> /PM <sub>2.5</sub>	CO	VOC	CO <sub>2e</sub>
Catalyst 5 Empty and Fill	4	< 0.01	-	-	-
Catalyst 6 Empty and Fill	1	0.03	-	-	-
Catalyst 7 Empty and Fill	1	0.12	-	-	-
Manual Sampling Activities	10,000	-	-	0.04	-
Tank Cleaning	5	-	-	0.73	-
Tote Filling	50	-	-	0.18	-
Drain Sump Cleaning	25	-	-	< 0.01	-
Temporary Mobile Tanks	5	-	-	0.17	-
Thermal Oxidizer Gun Cleaning	400	-	-	0.04	-
Control Valve Block and Bleed Emissions	264	-	< 0.01	0.01	-
Decontamination Washings	1	-	-	1.10	-
CO <sub>2</sub> Compressor SSM	14	-	4.90	0.09	1,355

**IX. Insignificant Activities (LAC 33:III.501.B.5)**

ID No.	Description	Capacity (gallons/each)	Citation
IA1	Diesel Storage Tank (T-Diesel)	3,760	A.3
IA2	Heavy Organic Acid Totes (7)	350	A.3
IA3	Biotreatment Chemical Tote 1 (85% Phosphoric Acid)	119	A.4
IA4	Biotreatment Chemical Tote 2 (100% Micronutrients)	53	A.2
IA5	Biotreatment Chemical Tote 3 (DAF Emulsion Polymer)	439	A.3
IA6	Biotreatment Chemical Tote 4 (Centrifuge Emulsion Polymer)	360	A.3
IA7	Boiler Feedwater Chemical Tote	2,000	B.8
IA8	Cooling Tower Dosing Chemical Tote 1	5,000	B.8
IA9	Cooling Tower Dosing Chemical Tote 2	5,000	B.8
IA10	Cooling Tower Dosing Chemical Tote 3	5,000	B.8
IA11	50% Caustic Soda Storage Tank (F7511)	14,397	B.40
IA12	50% Caustic Soda Storage Tank	14,397	B.40
IA13	Lab Local Extracts for Routine Chemical or Physical Analysis	-	A.6
IA14	Laboratory Fume Cupboards	-	A.6

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

Mitsubishi Chemical America, Inc. - MCA Geismar Site

Agency Interest No.: 234532

Geismar, Ascension Parish, Louisiana

**X. Applicable Louisiana and Federal Air Quality Requirements**

EQT No.	Description	LAC 33:III.												LAC 33:III.Chapter						
		509	2103	2109	2111	2113	2115	2121	2122	2147	2153	5*	9	11	13	15	22	29*	51*	56
EQT0001	B6109 – CO MeOH Auxiliary Boiler	1											3	1	3	2				
EQT0002	B6101 – CO MeOH Fired Heater	1											3	1	3	2				
EQT0003	B7801A – MMA Plant HTF Package Heater A	1											3	1	3	1				
EQT0004	B7801B – MMA Plant HTF Package Heater B	1											3	1	3	1				
EQT0005	B7801C – MMA Plant HTF Package Heater C	1											3	1	3	1				
EQT0006	L6104 – POx Unit Start-up Burner	1											3	1	3	2	2			
EQT0007	B5701 – Formalin Plant Thermal Oxidizer	1											3	1	3	2				
EQT0008	L7402 – MMA Plant Thermal Oxidizer	1											3	1	3	2				
EQT0009	H7401 – Combined Flare	1											3	1	3	2				
EQT0010	L7201 – Cooling Tower	1																		
EQT0011	L7530 – Wastewater Treatment Plant	1											2							
EQT0012	L7901 – Diesel Emergency Generator	1															1	1	3	2
EQT0013	F7618A – Stripper Process Condensate Tank A	1																		
EQT0014	F7618B – Stripper Process Condensate Tank B	1																		
EQT0015	F7501 – Wastewater Buffer Tank	1																		
EQT0016	F7802 – HTF Storage Tank	1																		
EQT0017	F7230 – Urea Solution Storage Tank	1																		
EQT0018	TF-SCBR – Tank Farm Vent Scrubber	1																		
EQT0019	F7602A – MMA Product Tank A	1																		
EQT0020	F7602B – MMA Product Tank B	1																		
EQT0021	F7603 – Aqueous Phase Tank	1																		
EQT0022	F7604 – MMA Reactor Feed Tank	1																		

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

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**X. Applicable Louisiana and Federal Air Quality Requirements**

EQT No.	Description	LAC 33:III. Chapter																			
		509	2103	2109	2111	2113	2115	2121	2122	2147	2153	5*	9	11	13	15	22	29*	51*	56	59*
EQT0023	F7605 – Off Spec Crude MMA Product Tank																				
EQT0024	F7606 – Crude MMA Tank																				
EQT0025	F7608 – Combined Methanol Tank																				
EQT0026	F7611 – Heavy Ester Tank																				
EQT0027	F7612 – Formalin Feed Tank																				
EQT0028	F7613 – Azeo Tank																				
EQT0029	F7614 – Stabilizer Tank																				
EQT0030	F7616 – Raw Methanol Tank																				
EQT0031	F7617A – Pure Methanol Tank A																				
EQT0032	F7617B – Pure Methanol Tank B																				
EQT0033	F7619 – Pure Methanol Column Sidedraw Tank																				
EQT0034	F6002 – Methanol Slop Vessel																				
EQT0035	F6204 – Amine Sump & Storage Vessel																				
EQT0036	COMeOH1 – CO MeOH Plant Startup Vent 1																				
EQT0037	COMeOH2 – CO MeOH Plant Startup Vent 2																				
EQT0038	COMeOH3 – CO MeOH Plant Startup Vent 3																				
EQT0039	SUSD4 – Startup Vent 4																				
EQT0040	MMA5 – MMA Vent 5																				
EQT0041	ANZERPG – Continuous Analyzer Purge																				
EQT0044	MMA-SYN – MMA Reactors and Recovery Vents																				
EQT0045	MMA-DIST – MMA Distillation and Recovery Vents																				
EQT0046	MeOH-SYN – Methanol Reactor and Recovery Vents																				

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY****Mitsubishi Chemical America, Inc. - MCA Geismar Site****Agency Interest No.: 234532****Geismar, Ascension Parish, Louisiana****X. Applicable Louisiana and Federal Air Quality Requirements**

EQT No.	Description	LAC 33:III.												LAC 33:III.Chapter						
		509	2103	2109	2111	2113	2115	2121	2122	2147	2153	5*	9	11	13	15	22	29*	51*	56
EQT0047	MeOH-DIST – Methanol Distillation and Recovery Vents	1						3		2										
EQT0048	MeP-SYN – MeP Reactor and Recovery Vents	1						3		2										
EQT0049	MeP-DIST – MeP Distillation and Recovery Vents	1						3		2										
EQT0050	FML-RCTR – Formalin Reactors and Recovery Vents	1						3		2										
EQT0051	POx-RCTR – POx Reactor and Recovery Vents	1						3		2										
EQT0052	VCS/CVS – Vapor Collection System/Closed Vent System	1						3		2										
FUG0001	MCA-FUG - Equipment Leaks	1						3		1										
FUG0002	PM-ROAD - Plant Road Fugitives	1															1			
UNF001	AI-234532 – MCA Geismar Site	1						1									1	1	1	1

**KEY TO MATRIX**

- 1 - The regulations have applicable requirements which apply to this particular emission source.  
- The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
  - 2 - The regulations have applicable requirements which apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
  - 3 - The regulations apply to this general type of emission source (i.e. vents, furnaces, and fugitives) but do not apply to this particular emission source.  
Blank – The regulations clearly do not apply to this type of emission source.
- \* The regulations indicated above are State Only regulations.
- ▲ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the "Specific Requirements" report specifically states that the regulation is State Only.

## LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Mitsubishi Chemical America, Inc. - MCA Geismar Site

Agency Interest No.: 234532

Geismar, Ascension Parish, Louisiana

## X. Applicable Louisiana and Federal Air Quality Requirements

EQT No.	Description	40 CFR 60 Subpart												40 CFR 61 Subpart												40 CFR Part											
		A	Db	Dc	Kb	VWa	III	NNN	RRR	III	A	J	M	FF	A	F	G	H	Q	4Z	5D	64	68	82													
EQT0001	B6109 – CO MeOH Auxiliary Boiler										1	1																									
EQT0002	B6101 – CO MeOH Fired Heater										3	1	1																								
EQT0003	B7801A – MMA Plant HTF Package Heater A										1																										
EQT0004	B7801B – MMA Plant HTF Package Heater B										1																										
EQT0005	B7801C – MMA Plant HTF Package Heater C										1																										
EQT0006	L6104 – POx Unit Start-up Burner										3																										
EQT0007	B5701 – Formalin Plant Thermal Oxidizer										1																										
EQT0008	L7402 – MMA Plant Thermal Oxidizer										1																										
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EQT0010	L7201 – Cooling Tower																																				
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EQT0016	F7802 – HTF Storage Tank										3																										
EQT0017	F7730 – Urea Solution Storage Tank										3																										
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EQT0019	F7602A – MMA Product Tank A										3																										
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EQT0021	F7603 – Aqueous Phase Tank										3																										
EQT0022	F7604 – MMA Reactor Feed Tank										3																										
EQT0023	F7605 – Off Spec Crude MMA Product Tank										3																										

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EQT No.	Description	40 CFR 60 Subpart												40 CFR 63 Subpart												40 CFR Part			
		A	D <sub>b</sub>	D <sub>c</sub>	K <sub>b</sub>	V <sub>a</sub>	III	MNN	RRR	III	A	J	M	FF	A	F	G	H	Q	4Z	5D	64	68	82					
EQT0024	F7606 – Crude MMA Tank																									1			
EQT0025	F7608 – Combined Methanol Tank																									1			
EQT0026	F7611 – Heavy Ester Tank																									1			
EQT0027	F7612 – Formalin Feed Tank																									1			
EQT0028	F7613 – Azeo Tank																									1			
EQT0029	F7614 – Stabilizer Tank																									1			
EQT0030	F7616 – Raw Methanol Tank																									1			
EQT0031	F7617A – Pure Methanol Tank A																									1			
EQT0032	F7617B – Pure Methanol Tank B																									1			
EQT0033	F7619 – Pure Methanol Column Sidedraw Tank																									1			
EQT0034	F6002 – Methanol Slop Vessel																									3			
EQT0035	F6204 – Amine Sump & Storage Vessel																									3			
EQT0036	COMEOH1 – CO MeOH Plant Startup Vent 1																												
EQT0037	COMEOH2 – CO MeOH Plant Startup Vent 2																												
EQT0038	COMEOH3 – CO MeOH Plant Startup Vent 3																												
EQT0039	SUSD4 – Startup Vent 4																									1			
EQT0040	MMA5 – MMA Vent 5																									1			
EQT0041	ANZERPG – Continuous Analyzer Purge																									3			
EQT0044	MMA-SYN – MMA Reactors and Recovery Vents																									1			
EQT0045	MMA-DIST – MMA Distillation and Recovery Vents																									1			
EQT0046	MeOH-SYN – Methanol Reactor and Recovery Vents																									1			
EQT0047	MeOH-DIST – Methanol Distillation and Recovery Vents																									1			
EQT0048	MeP-SYN – MeP Reactor and Recovery Vents																									1			

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

Mitsubishi Chemical America, Inc. - MCA Geismar Site

Agency Interest No.: 234532

Geismar, Ascension Parish, Louisiana

**X. Applicable Louisiana and Federal Air Quality Requirements**

EQT No.	Description	40 CFR 60 Subpart				40 CFR 61 Subpart				40 CFR 63 Subpart				40 CFR Part										
		A	D <sub>b</sub>	D <sub>c</sub>	K <sub>b</sub>	Wa	III	NNN	RRR	III	A	J	M	FF	A	F	G	H	Q	42	5D	64	68	82
EQT0049	MeP-DIST – MeP Distillation and Recovery Vents																							
EQT0050	FML-RCTR – Formalin Reactors and Recovery Vents																							
EQT0051	POX-RCTR – POx Reactor and Recovery Vents																							
EQT0052	VCS/CVS – Vapor Collection System/Closed Vent System																							
FUG0001	MCA-FUG - Equipment Leaks																							
FUG0002	PM-ROAD - Plant Road Fugitives																							
UNF0001	AI-234532 – MCA Geismar Site	1																	1	1				1

**KEY TO MATRIX**

- 1 - The regulations have applicable requirements which apply to this particular emission source.  
-The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
  - 2 - The regulations have applicable requirements which apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
  - 3 - The regulations apply to this general type of emission source (i.e. vents, furnaces, and fugitives) but do not apply to this particular emission source.  
Blank – The regulations clearly do not apply to this type of emission source.
- \* The regulations indicated above are State Only regulations.
- ▲ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the "Specific Requirements" report specifically states that the regulation is State Only.

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Mitsubishi Chemical America, Inc. - MCA Geismar Site**  
**Agency Interest No.: 234532**  
**Geismar, Ascension Parish, Louisiana**

**XI. Explanation for Exemption Status or Non-Applicability of a Source**

ID No:	Requirement	Status	Citation	Explanation
EQT0001	LAC 33:III.Chapter 11	Does not apply	LAC 33:III.1107.B.1	Fueled by natural gas and/or other gaseous fuels with a carbon to hydrogen molecular ratio < 0.34.
	LAC 33:III.Chapter 15	Does not apply	LAC 33:III.1502.A.3	Potential SO <sub>2</sub> emissions < 5 tons/year.
	LAC 33:III.Chapter 22	Exempt	LAC 33:III.2201.C.15	Subject to NOx BACT limit, which is more stringent than the limit of LAC 33:III.2201.D, Table D-1A.
	40 CFR 64 - CAM	Exempt	40 CFR 64.2(b)(1)(vi)	NOx and CO limitations specify a continuous compliance determination method.
EQT0002	LAC 33:III.Chapter 11	Does not apply	LAC 33:III.1107.B.1	Fueled by natural gas and/or other gaseous fuels with a carbon to hydrogen molecular ratio < 0.34.
	LAC 33:III.Chapter 15	Does not apply	LAC 33:III.1502.A.3	Potential SO <sub>2</sub> emissions < 5 tons/year.
	LAC 33:III.Chapter 22	Exempt	LAC 33:III.2201.C.15	Subject to NOx BACT limit, which is more stringent than the limit of LAC 33:III.2201.D, Table D-1A.
	40 CFR 60 Subpart Db	Does not apply	40 CFR 60.40b(a)	Does not meet definition of steam generating unit.
EQT0003 – EQT0005	40 CFR 63 Subpart DDDDD	Does not apply	40 CFR 63.7491(l)	Utilized as a control device specified in 40 CFR 63.7491(i).
	40 CFR 64 - CAM	Exempt	40 CFR 64.2(b)(1)(vi)	NOx and CO limitations specify a continuous compliance determination method.
	LAC 33:III.Chapter 11	Does not apply	LAC 33:III.1107.B.1	Fueled by natural gas.
	LAC 33:III.Chapter 15	Does not apply	LAC 33:III.1502.A.3	Potential SO <sub>2</sub> emissions < 5 tons/year.
EQT0006	LAC 33:III.Chapter 22	Exempt	LAC 33:III.2201.C.15	Subject to NOx BACT limit, which is more stringent than the limit of LAC 33:III.2201.D, Table D-1A
	LAC 33:III.Chapter 11	Does not apply	LAC 33:III.1107.B.1	Fueled by natural gas.
	LAC 33:III.Chapter 15	Does not apply	LAC 33:III.1502.A.3	Potential SO <sub>2</sub> emissions < 5 tons/year.
	LAC 33:III.Chapter 22	Exempt	LAC 33:III.2201.C.1	Maximum rated capacity < 40 MM BTU/hr.
EQT0007	LAC 33:III.Chapter 51	Exempt	LAC 33:III.5105.B.3.a	TAP emissions from combustion of Group 1 virgin fossil fuels.
	40 CFR 60 Subpart Dc	Does not apply	40 CFR 60.40(a)	Does not meet definition of steam generating unit.

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY****Mitsubishi Chemical America, Inc. - MCA Geismar Site**

Agency Interest No.: 234532

**Geismar, Ascension Parish, Louisiana****XI. Explanation for Exemption Status or Non-Applicability of a Source**

ID No:	Requirement	Status	Citation	Explanation
EQT0007	LAC 33:III.Chapter 11	Does not apply	LAC 33:III.1107.B.1	Combust gaseous fuels with C/H molecular ratio < 0.34.
	LAC 33:III.Chapter 15	Does not apply	LAC 33:III.1502.A.3	Potential SO <sub>2</sub> emissions < 5 tons/year.
	LAC 33:III.2115	Does not apply	LAC 33:III.2115.A	Subject to requirements of 40 CFR 63 Subpart G.
	LAC 33:III.Chapter 22	Exempt	LAC 33:III.2201.C.7	Thermal oxidizers – Exempt by definition.
	40 CFR 64 - CAM	Does not apply	40 CFR 64.2(a)(3)	Pre-control NO <sub>x</sub> emissions < 100 tons/year.
	LAC 33:III.Chapter 15	Does not apply	LAC 33:III.1502.A.3	Potential SO <sub>2</sub> emissions < 5 tons/year.
	LAC 33:III.2115	Does not apply	LAC 33:III.2115.A	Subject to requirements of 40 CFR 63 Subpart G.
	LAC 33:III.Chapter 22	Exempt	LAC 33:III.2201.C.7	Thermal oxidizers – Exempt by definition.
	40 CFR 64 - CAM	Exempt	40 CFR 64.2(b)(1)(vi)	NO <sub>x</sub> and CO limitations specify a continuous compliance determination method.
	LAC 33:III.Chapter 15	Does not apply	LAC 33:III.1502.A.3	Potential SO <sub>2</sub> emissions < 5 tons/year.
	LAC 33:III.2115	Does not apply	LAC 33:III.2115.A	Subject to requirements of 40 CFR 63 Subpart G.
	LAC 33:III.Chapter 22	Exempt	LAC 33:III.2201.C.7	Flare – Exempt by definition.
	40 CFR 64 - CAM	Exempt	40 CFR 64.2(b)(1)(i)	Subject to requirements of 40 CFR 63 Subpart G.
EQT0010	40 CFR 63 Subpart Q	Does not apply	40 CFR 63.400(a)	No chromium based water treatment chemicals are used.
EQT0011	LAC 33:III.2109	Exempt	LAC 33:III.2109.B.3	Vapor pressure of VOC in wastewater < 0.5 psia.
	LAC 33:III.2153	Exempt	LAC 33:III.2153.G.6	Subject to requirements of 40 CFR 63 Subpart G.
	LAC 33:III.Chapter 15	Does not apply	LAC 33:III.1502.A.3	Potential SO <sub>2</sub> emissions < 5 tons/year.
	LAC 33:III.Chapter 22	Exempt	LAC 33:III.2201.C.14	Diesel fired stationary internal combustion engine.
EQT0013, EQT0014	LAC 33:III.2103	Does not apply	LAC 33:III.2103.B	Vapor pressure < 1.5 psia.
EQT0015, EQT0021	40 CFR 60 Subpart Kb	Does not apply	40 CFR 60.110b(b)	Vapor pressure < 0.5 psia.
EQT0016, EQT0017, EQT0035	LAC 33:III.2103	Does not apply	LAC 33:III.2103	Vapor pressure < 1.5 psia.
	40 CFR 60 Subpart Kb	Does not apply	40 CFR 60.110b(b)	Vapor pressure < 0.5 psia and/or volume < 75 m <sup>3</sup> .
	40 CFR 63 Subpart G	Does not apply	40 CFR 63.111	Stored materials do not contain HAP.

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Mitsubishi Chemical America, Inc. - MCA Geismar Site**  
**Agency Interest No.: 234532**  
**Geismar, Ascension Parish, Louisiana**

**XI. Explanation for Exemption Status or Non-Applicability of a Source**

ID No:	Requirement	Status	Citation	Explanation
EQT0018	40 CFR 64 - CAM	Exempt	40 CFR 64.2(b)(1)(i)	Subject to standards of 40 CFR 63 Subpart G.
EQT0019, EQT0020, EQT0023	LAC 33:III.2103	Does not apply	LAC 33:III.2103.B	Vapor pressure < 1.5 psia.
EQT0024, EQT0026, EQT0027	40 CFR 60 Subpart Kb	Does not apply	40 CFR 63.110(b)(1)	Compliance with 40 CFR 63 Subpart G supersedes compliance with 40 CFR 60 Subpart Kb.
EQT0022, EQT0025 EQT0028 – EQT0032	40 CFR 60 Subpart Kb	Does not apply	40 CFR 63.110(b)(1)	Compliance with 40 CFR 63 Subpart G supersedes compliance with 40 CFR 60 Subpart Kb.
EQT0033	LAC 33:III.2103	Does not apply	LAC 33:III.2103.B	Vapor pressure < 1.5 psia.
EQT0034	LAC 33:III.2103	Does not apply	LAC 33:III.2103.A	Vapor pressure < 1.5 psia.
	40 CFR 60 Subpart Kb	Does not apply	40 CFR 60.110b	Tank volume < 10,000 gallons.
	40 CFR 63 Subpart G	Does not apply	40 CFR 63.101	Does not meet definition of a storage vessel (volume < 38 m <sup>3</sup> ).
EQT0037	LAC 33:III.2115	Does not apply	LAC 33:III.2115.A	The vent does not contain VOC.
EQT0038	LAC 33:III.2115	Exempt	LAC 33:III.2115.I.1.d	The vent stream contains less than 3,000 ppmv of VOC.
EQT0039, EQT0040	LAC 33:III.2115	Does not apply	LAC 33:III.2115.A	Subject to control requirements of 40 CFR 63 Subpart G.
EQT0041	LAC 33:III.2115	Does not apply	LAC 33:III.2115.I.1.c	The vent stream contains less than 100 lbs per 24-hour.
	40 CFR 63 Subpart F	Does not apply	40 CFR 63.107(h)(9)	Does not meet definition of a gas stream since it exits analyzers.
EQT0044, EQT0045	LAC 33:III.2115	Does not apply	LAC 33:III.2115.A	Meets an exemption in another section of Chapter 21.
EQT0048, EQT0049	LAC 33:III.2147	Exempt	LAC 33:III.2147.A.2.g	Subject to 40 CFR 63 Subpart G.
EQT0046, EQT0047	LAC 33:III.2115	Does not apply	LAC 33:III.2115.A	Meets an exemption in another section of Chapter 21.
	LAC 33:III.2147	Exempt	LAC 33:III.2147.A.2.g	Subject to 40 CFR 63 Subpart G.
	40 CFR 60 Subpart NNN 40 CFR 60 Subpart RRR	Does not apply	40 CFR 63.110(d)(4)	Subject to requirements of 40 CFR 63 Subpart G.
EQT0050	LAC 33:III.2115	Does not apply	LAC 33:III.2115.A	Meets an exemption in another section of Chapter 21.
	LAC 33:III.2147	Exempt	LAC 33:III.2147.A.2.g	Subject to 40 CFR 63 Subpart G.
	40 CFR 60 Subpart NNN	Does not apply	40 CFR 63.110(d)(4)	Subject to requirements of 40 CFR 63 Subpart G.
	40 CFR 60 Subpart III	Does not apply	40 CFR 63.110(d)(1)	Subject to requirements of 40 CFR 63 Subpart G.

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

Mitsubishi Chemical America, Inc. - MCA Geismar Site

Agency Interest No.: 234532

Geismar, Ascension Parish, Louisiana

**XI. Explanation for Exemption Status or Non-Applicability of a Source**

ID No:	Requirement	Status	Citation	Explanation
EQT0051	LAC 33:III.2147	Does not apply	LAC 33:III.2147.A.1	Does not vent to the atmosphere.
	40 CFR 60 Subpart III	Does not apply	40 CFR 60.610(a)	Does not produce any SOClVI chemicals.
	40 CFR 63 Subpart F	Does not apply	40 CFR 63.107(h)	Does not meet definition of a gas stream since it is vented to the fuel gas system.
FUG0001	LAC 33:III.2121	Does not apply	LAC 33:III.2122.A.4	Subject to LAC 33:III.2122.
	40 CFR 61 Subpart J	Does not apply	40 CFR 61.110(c)(3)	No components are in benzene service.

The above table provides explanation for both the exemption status or non-applicability of a source cited by 2 or 3 in the matrix presented in Section X of this permit.

**INVENTORIES**  
**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**Subject Item Inventory:**

ID	Description	Tank Volume	Max Operating Rate	Normal Operating Rate	Comments	Operating Time
<b>MCA Geismar Site</b>						
EQT 0001	B6109 - CO MeOH Auxiliary Boiler	321 MM BTU/hr	321 MM BTU/hr	321 MM BTU/hr		8760 hr/yr
EQT 0002	B6101 - CO MeOH Fired Heater	105 MM BTU/hr	105 MM BTU/hr	105 MM BTU/hr		8760 hr/yr
EQT 0003	B7801A - MMA Plant HTF Package Heater A	73 MM BTU/hr	73 MM BTU/hr	73 MM BTU/hr		8760 hr/yr
EQT 0004	B7801B - MMA Plant HTF Package Heater B	73 MM BTU/hr	73 MM BTU/hr	73 MM BTU/hr		8760 hr/yr
EQT 0005	B7801C - MMA Plant HTF Package Heater C	73 MM BTU/hr	73 MM BTU/hr	73 MM BTU/hr		8760 hr/yr
EQT 0006	L6104 - POx Unit Start-up Burner	8 MM BTU/hr	8 MM BTU/hr	8 MM BTU/hr		200 hr/yr
EQT 0007	B5701 - Formalin Plant Thermal Oxidizer	107.25 MM BTU/hr	107.25 MM BTU/hr	107.25 MM BTU/hr		8760 hr/yr
EQT 0008	L7402 - MMA Plant Thermal Oxidizer	236.24 MM BTU/hr	205.25 MM BTU/hr	205.25 MM BTU/hr		8760 hr/yr
EQT 0009	H7401 - Combined Flare	745.37 MM BTU/hr	5865.36 MM BTU/hr	5865.36 MM BTU/hr		8760 hr/yr
EQT 0010	L7201 - Cooling Tower	129580 gallons/min	129580 gallons/min	129580 gallons/min		8760 hr/yr
EQT 0011	L7530 - Wastewater Treatment Plant	16700 gallons/hr	10100 gallons/hr	10100 gallons/hr		8760 hr/yr
EQT 0012	L7901 - Diesel Emergency Generator	1140 horsepower	1140 horsepower	1140 horsepower		100 hr/yr
EQT 0013	F7618A - Stripper Process Condensate Tank A	76354 gallons	78.63 bbl/hr	344377.5 bbl/yr		8760 hr/yr
EQT 0014	F7618B - Stripper Process Condensate Tank B	76354 gallons	78.63 bbl/hr	344377.5 bbl/yr		8760 hr/yr
EQT 0015	F7501 - Wastewater Buffer Tank	376014 gallons	347.3 bbl/hr	3.04 MM bbl/yr		8760 hr/yr
EQT 0016	F7802 - HTF Storage Tank	81219 gallons	314.49 bbl/hr	8299 bbl/yr		8760 hr/yr
EQT 0017	F7230 - Urea Solution Storage Tank	13279 gallons	113.22 bbl/hr	2271 bbl/yr		8760 hr/yr
EQT 0018	TF-SCBR - Tank Farm Vent Scrubber					8760 hr/yr
EQT 0019	F7602A - MMA Product Tank A	203258 gallons				8760 hr/yr
EQT 0020	F7602B - MMA Product Tank B	203258 gallons				8760 hr/yr
EQT 0021	F7603 - Aqueous Phase Tank	203258 gallons				8760 hr/yr
EQT 0022	F7604 - MMA Reactor Feed Tank	321702 gallons				8760 hr/yr
EQT 0023	F7605 - Off Spec Crude MMA Product Tank	321702 gallons				8760 hr/yr
EQT 0024	F7606 - Crude MMA Tank	321702 gallons				8760 hr/yr
EQT 0025	F7608 - Combined Methanol Tank	203258 gallons				8760 hr/yr
EQT 0026	F7611 - Heavy Ester Tank	321702 gallons				8760 hr/yr
EQT 0027	F7612 - Formalin Feed Tank	1.2 million gallons				8760 hr/yr
EQT 0028	F7613 - Azeo Tank	56871.8 gallons				8760 hr/yr
EQT 0029	F7614 - Stabilizer Tank	21151 gallons				8760 hr/yr
EQT 0030	F7616 - Raw Methanol Tank	203258 gallons				8760 hr/yr
EQT 0031	F7617A - Pure Methanol Tank A	203258 gallons				8760 hr/yr
EQT 0032	F7617B - Pure Methanol Tank B	203258 gallons				8760 hr/yr
EQT 0033	F7619 - Pure Methanol Column Sidedraw Tank	76354 gallons				8760 hr/yr
EQT 0034	F6002 - Methanol Slop Vessel	928 gallons				8760 hr/yr
EQT 0035	F6204 - Amine Sump & Storage Vessel	43133 gallons				8760 hr/yr
EQT 0036	COMeOH1 - CO MeOH Plant Startup Vent 1			366069 scf/hr		500 hr/yr
EQT 0037	COMeOH2 - CO MeOH Plant Startup Vent 2			23611087 scf/hr		500 hr/yr
EQT 0038	COMeOH3 - CO MeOH Plant Startup Vent 3			346036 scf/hr		200 hr/yr
EQT 0039	SUSDA - Startup Vent 4			14913 scf/hr		400 hr/yr
EQT 0040	MMA5 - MMA Vent 5			31222 lb/yr		8760 hr/yr
EQT 0041	ANZER-FG - Continuous Analyzer Purge			657 scf/hr		8760 hr/yr
EQT 0044	MMA-SYN - MMA Reactors and Recovery Vents					8760 hr/yr
EQT 0045	MMA-DIST - MMA Distillation and Recovery Vents					8760 hr/yr
EQT 0046	MeOH-S/N - Methanol Reactor and Recovery Vents					8760 hr/yr
EQT 0047	MeOH-DIST - Methanol Distillation and Recovery Vents					8760 hr/yr

**INVENTORIES**  
**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER20220001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**Subject Item Inventory:**

ID	Description	Tank Volume	Max Operating Rate	Normal Operating Rate	Comments	Operating Time
<b>MCA Geismar Site</b>						
EQT 0048	MeP-SYN - MeP Reactor and Recovery Vents					8760 hr/yr
EQT 0049	MeP-DIST - MeP Distillation and Recovery Vents					8760 hr/yr
EQT 0050	FML-RCTR - Formalin Reactors and Recovery Vents					8750 hr/yr
EQT 0051	POx-RCTR - POx Reactor and Recovery Vents					8750 hr/yr
EQT 0052	VCS/CVS - Vapor Collection System / Closed Vent System				None Specified	
FUG 0001	MCA-FUG - Equipment Leaks					8760 hr/yr
FUG 0002	PM-ROAD - Plant Road Fugitives					8760 hr/yr

**Stack Information:**

ID	Description	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Temperature (oF)
<b>MCA Geismar Site</b>							
EQT 0001	B6109 - CO MeOH Auxiliary Boiler	4.63		164.04	98.43	99428	356
EQT 0002	B6101 - CO MeOH Fired Heater	2.66		164.04	98.43	32818	356
EQT 0003	B7801A - MMA Plant HTF Package Heater A	2.2		196.85	98.43	22449	356
EQT 0004	B7801B - MMA Plant HTF Package Heater B	2.2		196.85	98.43	22449	356
EQT 0005	B7801C - MMA Plant HTF Package Heater C	2.2		196.85	98.43	22449	356
EQT 0006	L6104 - POx Unit Start-up Burner	1.35		139.44	28.87	2480	356
EQT 0007	B5701 - Formalin Plant Thermal Oxidizer	3.74		164.04	98.43	64877	356
EQT 0008	L7402 - MMA Plant Thermal Oxidizer	4.2		164.04	98.43	81817	356
EQT 0009	H7401 - Combined Flare	14.93		246.06	65.62	689248	1832
EQT 0010	L7201 - Cooling Tower			67.78	25.26		90
EQT 0011	L7530 - Wastewater Treatment Plant			20			
EQT 0012	L7901 - Diesel Emergency Generator	.67		12	229.66	4810	789
EQT 0013	F7618A - Stripper Process Condensate Tank A	.67		36.09	.35	7	80
EQT 0014	F7618B - Stripper Process Condensate Tank B	.67		36.09	.35	7	80
EQT 0015	F7501 - Wastewater Buffer Tank	.67		40.32	1.55	32	80
EQT 0016	F7802 - HTF Storage Tank	.33		24.5	5.62	29	80
EQT 0017	F7230 - Urea Solution Storage Tank	.5		13.5	.9	11	80

**Relationships:**

ID	Description	Relationship	ID	Description
EQT 0018	TF-SCBR - Tank Farm Vent Scrubber	Controlled by Secondary	EQT 0009	H7401 - Combined Flare
EQT 0018	TF-SCBR - Tank Farm Vent Scrubber	Controlled by Primary	EQT 0008	L7402 - MMA Plant Thermal Oxidizer
EQT 0019	F7602A - MMA Product Tank A	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber
EQT 0020	F7602B - MMA Product Tank B	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber
EQT 0021	F7603 - Aqueous Phase Tank	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber
EQT 0022	F7604 - MMA Reactor Feed Tank	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber
EQT 0023	F7605 - Off Spec Crude MMA Product Tank	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber
EQT 0024	F7606 - Crude MMA Tank	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber
EQT 0025	F7608 - Combined Methanol Tank	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber
EQT 0026	F7611 - Heavy Ester Tank	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber
EQT 0027	F7612 - Formalin Feed Tank	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber
EQT 0028	F7613 - Azeo Tank	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber
EQT 0029	F7614 - Stabilizer Tank	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber
EQT 0030	F7616 - Raw Methanol Tank	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber

**INVENTORIES**  
**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER20220001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**Relationships:**

Relationships:		Description	Relationship	ID	Description
EQT 0031	F7617A - Pure Methanol Tank A	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber	
EQT 0032	F7617B - Pure Methanol Tank B	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber	
EQT 0033	F7619 - Pure Methanol Column Sidedraw Tank	Controlled by	EQT 0018	TF-SCBR - Tank Farm Vent Scrubber	
EQT 0034	F6002 - Methanol Slop Vessel	Controlled by	EQT 0009	H7401 - Combined Flare	
EQT 0035	F6204 - Amine Sump & Storage Vessel	Controlled by	EQT 0009	H7401 - Combined Flare	
EQT 0036	COMeOH1 - CO MeOH Plant Startup Vent 1	Controlled by	EQT 0009	H7401 - Combined Flare	
EQT 0037	COMeOH2 - CO MeOH Plant Startup Vent 2	Controlled by	EQT 0009	H7401 - Combined Flare	
EQT 0038	COMeOH3 - CO MeOH Plant Startup Vent 3	Controlled by	EQT 0009	H7401 - Combined Flare	
EQT 0039	SUSD4 - Startup Vent 4	Controlled by	EQT 0009	H7401 - Combined Flare	
EQT 0040	MMA5 - MMA Vent 5	Controlled by Secondary	EQT 0009	H7401 - Combined Flare	
EQT 0040	MMA5 - MMA Vent 5	Controlled by Primary	EQT 0008	L7402 - MMA Plant Thermal Oxidizer	
EQT 0041	ANZER-PG - Continuous Analyzer Purge	Controlled by	EQT 0009	H7401 - Combined Flare	
EQT 0044	MMA-SYN - MMA Reactors and Recovery Vents	Controlled by Secondary	EQT 0009	H7401 - Combined Flare	
EQT 0044	MMA-SYN - MMA Reactors and Recovery Vents	Controlled by Primary	EQT 0008	L7402 - MMA Plant Thermal Oxidizer	
EQT 0045	MMA-DIST - MMA Distillation and Recovery Vents	Controlled by Primary	EQT 0008	L7402 - MMA Plant Thermal Oxidizer	
EQT 0045	MMA-DIST - MMA Distillation and Recovery Vents	Controlled by Secondary	EQT 0009	H7401 - Combined Flare	
EQT 0046	MeOH-SYN - Methanol Reactor and Recovery Vents	Controlled by Primary	EQT 0001	B6109 - CO MeOH Auxiliary Boiler	
EQT 0046	MeOH-SYN - Methanol Reactor and Recovery Vents	Controlled by Primary	EQT 0002	B6101 - CO MeOH Fired Heater	
EQT 0046	MeOH-SYN - Methanol Reactor and Recovery Vents	Controlled by Secondary	EQT 0009	H7402 - MMA Plant Thermal Oxidizer	
EQT 0047	MeOH-DIST - Methanol Distillation and Recovery Vents	Controlled by Primary	EQT 0002	B6101 - CO MeOH Fired Heater	
EQT 0047	MeOH-DIST - Methanol Distillation and Recovery Vents	Controlled by Secondary	EQT 0009	H7401 - Combined Flare	
EQT 0047	MeOH-DIST - Methanol Distillation and Recovery Vents	Controlled by Primary	EQT 0001	B6109 - CO MeOH Auxiliary Boiler	
EQT 0048	MeP-SYN - MeP Reactor and Recovery Vents	Controlled by Secondary	EQT 0009	H7401 - Combined Flare	
EQT 0048	MeP-SYN - MeP Reactor and Recovery Vents	Controlled by Primary	EQT 0008	L7402 - MMA Plant Thermal Oxidizer	
EQT 0049	MeP-DIST - MeP Distillation and Recovery Vents	Controlled by Primary	EQT 0008	L7402 - MMA Plant Thermal Oxidizer	
EQT 0049	MeP-DIST - MeP Distillation and Recovery Vents	Controlled by Secondary	EQT 0009	H7401 - Combined Flare	
EQT 0050	FML-RCCTR - Formalin Reactors and Recovery Vents	Controlled by Secondary	EQT 0009	H7401 - Combined Flare	
EQT 0050	FML-RCCTR - Formalin Reactors and Recovery Vents	Controlled by Primary	EQT 0007	B5701 - Formalin Plant Thermal Oxidizer	
EQT 0051	POx-RCCTR - POx Reactor and Recovery Vents	Controlled by Secondary	EQT 0009	H7401 - Combined Flare	
EQT 0051	POx-RCCTR - POx Reactor and Recovery Vents	Controlled by Primary	EQT 0001	B6109 - CO MeOH Auxiliary Boiler	
EQT 0051	POx-RCCTR - POx Reactor and Recovery Vents	Controlled by Primary	EQT 0002	B6101 - CO MeOH Fired Heater	

**Subject Item Groups:**

ID	Group Type	Group Description
CRG 0001	Common Requirements Group	63-DDDDDD - 40 CFR 63 Subpart DDDDD Requirements
CRG 0002	Common Requirements Group	63G-GR1+2103 - 40 CFR 63 Subpart G Group 1 + LAC 33:III/2103 Storage Vessels
CRG 0003	Common Requirements Group	HEATERS - Common Requirements for Heaters
CRG 0004	Common Requirements Group	BACT - Common BACT Requirement
CRG 0005	Common Requirements Group	63G-GR1 - 40 CFR 63 Subpart G Group 1 Storage Vessels
CRG 0006	Common Requirements Group	63G-GR2WN - 40 CFR 63 Subpart G Group 2 Wastewater Tanks
UNF 0001	Unit or Facility Wide	AI-234532 - MCA Geismar Site

**Group Membership:**

Group ID	Group Description
CRG 0001	63-DDDDDD - 40 CFR 63 Subpart DDDDD Requirements
CRG 0001	EQT ID
	EQT Description
EQT 0001	B6109 - CO MeOH Auxiliary Boiler

**INVENTORIES**  
**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-Y0**  
**Air - Title V Regular Permit Initial**

**Group Membership:**

Group ID	Group Description	Group ID	Group Description
CRG 0001	63-DDDDD - 40 CFR 63 Subpart DDDDD Requirements	EQT ID	EQT Description
EQT 0003	B7801A - MMA Plant HTF Package Heater A	EQT 0004	B7801B - MMA Plant HTF Package Heater B
EQT 0005	B7801C - MMA Plant HTF Package Heater C	EQT 0006	L6104 - POX Unit Start-up Burner
CRG 0002	63G-GR1+2103 - 40 CFR 63 Subpart G Group 1 + LAC 33;III:2103 Storage Vessels	EQT ID	EQT Description
		EQT 0022	F7604 - MMA Reactor Feed Tank
		EQT 0025	F7608 - Combined Methanol Tank
		EQT 0028	F7613 - Azeo Tank
		EQT 0029	F7614 - Stabilizer Tank
		EQT 0030	F7616 - Raw Methanol Tank
		EQT 0031	F7617A - Pure Methanol Tank A
		EQT 0032	F7617B - Pure Methanol Tank B
CRG 0003	HEATERS - Common Requirements for Heaters	EQT ID	EQT Description
		EQT 0003	B7801A - MMA Plant HTF Package Heater A
		EQT 0004	B7801B - MMA Plant HTF Package Heater B
		EQT 0005	B7801C - MMA Plant HTF Package Heater C
CRG 0004	BACT - Common BACT Requirement	EQT ID	EQT Description
		EQT 0034	F6002 - Methanol Slop Vessel
		EQT 0035	F6204 - Amine Sump & Storage Vessel
		EQT 0037	COMeOH2 - CO MeOH Plant Startup Vent 2
		EQT 0038	COMeOH3 - CO MeOH Plant Startup Vent 3
		EQT 0039	SUSD4 - Startup Vent 4
		EQT 0040	MMA5 - MMA Vent 5
		EQT 0041	ANZER-PG - Continuous Analyzer Purge
		EQT 0044	MMA-SYN - MMA Reactors and Recovery Vents
		EQT 0045	MMA-DIST - MMA Distillation and Recovery Vents
		EQT 0046	MeOH-SYN - Methanol Reactor and Recovery Vents
		EQT 0047	MeOH-DIST - Methanol Distillation and Recovery Vents
		EQT 0048	MeP-SYN - MeP Reactor and Recovery Vents
		EQT 0049	MeP-DIST - MeP Distillation and Recovery Vents
		EQT 0050	FML-RCTR - Formalin Reactors and Recovery Vents
CRG 0005	63G-GR1 - 40 CFR 63 Subpart G Group 1 Storage Vessels	EQT ID	EQT Description
		EQT 0019	F7602A - MMA Product Tank A
		EQT 0020	F7602B - MMA Product Tank B
		EQT 0023	F7605 - Off Spec Crude MMA Product Tank
		EQT 0024	F7606 - Crude MMA Tank

**INVENTORIES**  
**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**Group Membership:**

Group ID	Group Description
CRG 0005	63G-GR1 - 40 CFR 63 Subpart G Group 1 Storage Vessels
EQT ID	<b>EQT Description</b>
EQT 0027	F7612 - Formain Feed Tank
CRG 0006	63G-GR2WW - 40 CFR 63 Subpart G Group 2 Wastewater Tanks
EQT ID	<b>EQT Description</b>
EQT 0011	L7530 - Wastewater Treatment Plant
EQT 0013	F7618A - Stripper Process Condensate Tank A
EQT 0014	F7618B - Stripper Process Condensate Tank B
EQT 0015	F7501 - Wastewater Buffer Tank

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group.

**Annual Maintenance Fee:**

Fee Number	Air Contaminant Source	Multipier	Units of Measure
0570	0570 Synthetic Resins Manufacture N.E.C. (Rated Capacity)	772	MM lbs/yr

**SIC Codes:**

2821	Plastics materials and resins	AI 234532
2821	Plastics materials and resins	UNF 001

EMISSION RATES FOR CRITERIA POLLUTANTS AND CO<sub>2</sub>e

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site

Activity Number: PER20220001

Permit Number: 0180-00233-V0

Air - Title V Regular Permit Initial

All Phases  
MCA Geismar Site

Subject Item	CO <sub>2</sub> e			PM 10			PM 2.5			SO <sub>2</sub>		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0001 B6109		165,499.00	2.39	2.39	10.48	2.39	10.48	2.39	10.48	0.19	0.19	0.84
EQT 0002 B6101		54,135.00	0.78	0.78	3.43	0.78	0.78	3.43	0.78	0.06	0.06	0.28
EQT 0003 B7801A		37,637.00	0.54	0.54	2.38	0.54	0.54	2.38	0.54	0.04	0.04	0.19
EQT 0004 B7801B		37,637.00	0.54	0.54	2.38	0.54	0.54	2.38	0.54	0.04	0.04	0.19
EQT 0005 B7801C		37,637.00	0.54	0.54	2.38	0.54	0.54	2.38	0.54	0.04	0.04	0.19
EQT 0006 L6104		94.00	0.001	0.06	0.01	0.001	0.06	0.01	<0.001	0.005	0.005	<0.01
EQT 0007 B5701		40,769.00	0.80	0.80	3.50	0.80	0.80	3.50	0.80	0.01	0.01	0.04
EQT 0008 L7402		184,082.00	2.50	3.00	10.95	2.50	3.00	10.95	2.50	0.02	0.02	0.07
EQT 0009 H7401		223,144.00	0.50	0.55	2.19	0.50	0.55	2.19	0.50	0.01	0.01	0.04
EQT 0010 L7201			0.42	0.42	1.85	0.22	0.22	0.96				
EQT 0011 L7530												
EQT 0012 L7901		66.00	0.004	0.37	0.02	0.004	0.37	0.02	<0.001	0.01	0.01	<0.01
EQT 0013 F7618A												
EQT 0014 F7618B												
EQT 0015 F7501												
EQT 0016 F7802												
EQT 0017 F7230												
FUG 0001 MCA-FUG		52.00										
FUG 0002 PM-ROAD		0.01	0.05	0.03	0.002	0.01	0.01	0.01				

**EMISSION RATES FOR CRITERIA POLLUTANTS AND CO<sub>2</sub>e**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site

Activity Number: PER20220001

Permit Number: 0180-00233-V0

Air - Title V Regular Permit Initial

All Phases  
MCA Geismar Site

Subject Item	NOx			CO			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb HR	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0001 B6109	4.82	4.82	23.60	2.36	2.36	11.00	1.15	1.15	5.02
EQT 0002 B6101	1.58	1.58	7.86	0.39	0.39	3.60	0.49	0.49	2.17
EQT 0003 B7801A	0.73	0.73	3.64	0.27	0.27	2.50	0.20	0.20	0.86
EQT 0004 B7801B	0.73	0.73	3.64	0.27	0.27	2.50	0.20	0.20	0.86
EQT 0005 B7801C	0.73	0.73	3.64	0.27	0.27	2.50	0.20	0.20	0.86
EQT 0006 L6104	0.02	0.78	0.08	0.01	0.66	0.07	0.001	0.04	<0.01
EQT 0007 B5701	3.75	3.75	16.51	5.36	5.36	23.49	0.19	0.19	0.82
EQT 0008 L7402	11.39	12.99	49.88	16.91	19.47	74.08	1.50	1.89	6.58
EQT 0009 H7401	4.55	50.68	19.94	90.56	799.18	396.65	2.29	80.45	10.05
EQT 0010 L7201							5.44	10.88	23.84
EQT 0011 L7530							0.04	0.20	0.19
EQT 0012 L7901	0.14	11.99	0.60	0.07	6.56	0.33	0.14	11.99	0.60
EQT 0013 F7618A							0.001	0.07	0.01
EQT 0014 F7618B							0.001	0.07	0.01
EQT 0015 F7501							<0.001	0.001	<0.01
EQT 0016 F7802							<0.001	0.21	<0.01
EQT 0017 F7230							<0.001	<0.001	<0.01
FUG 0001 MCA-FUG				1.07	1.07	4.69	4.08	4.08	17.88
FUG 0002 PM-ROAD									

EMISSION RATES FOR CRITERIA POLLUTANTS AND CO<sub>2</sub>e

AIID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site

Activity Number: PER20220001

Permit Number: 0180-00233-V0

Air - Title V Regular Permit Initial

Note: Emission rates associated with alternate operating scenarios (SCN) are not included in permitted totals unless otherwise noted in a footnote.

**EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site

Activity Number: PER20220001

Permit Number: 0180-00233-V0

Air - Title V Regular Permit Initial

All phases

Subject Item	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0001 B6109	1,4-Dichlorobenzene	<0.001	<0.001	<0.01
	Ammonia	1.43	1.43	6.28
	Barium (and compounds)	<0.001	<0.001	0.006
	Benzene	<0.001	<0.001	<0.01
	Cadmium (and compounds)	<0.001	<0.001	0.002
	Chromium VI (and compounds)	<0.001	<0.001	0.002
	Copper (and compounds)	<0.001	<0.001	0.001
	Formaldehyde	0.01	0.01	0.05
	Manganese (and compounds)	<0.001	<0.001	<0.01
	Methanol	0.28	0.28	1.24
	n-Hexane	0.28	0.28	1.24
	Naphthalene	<0.001	<0.001	<0.01
	Nickel (and compounds)	0.001	0.001	0.003
	Toluene	<0.001	<0.001	<0.01
	Zinc (and compounds)	0.01	0.01	0.04
EQT 0002 B6101	1,4-Dichlorobenzene	<0.001	<0.001	<0.01
	Ammonia	0.47	0.47	2.05
	Barium (and compounds)	<0.001	<0.001	0.002
	Benzene	<0.001	<0.001	<0.01
	Chromium VI (and compounds)	<0.001	<0.001	0.001
	Formaldehyde	0.004	0.004	0.02
	Methanol	0.21	0.21	0.94
	n-Hexane	0.09	0.09	0.41
	Nickel (and compounds)	<0.001	<0.001	0.001
	Toluene	<0.001	<0.001	<0.01
	Zinc (and compounds)	0.003	0.003	0.01
EQT 0003 B7801A	Ammonia	0.33	0.33	1.43
	Barium (and compounds)	<0.001	<0.001	0.001
	Benzene	<0.001	<0.001	<0.01
	Formaldehyde	0.003	0.003	0.01
	n-Hexane	0.06	0.06	0.28
	Nickel (and compounds)	<0.001	<0.001	0.001
	Toluene	<0.001	<0.001	<0.01
	Zinc (and compounds)	0.002	0.002	0.01
EQT 0004 B7801B	Ammonia	0.33	0.33	1.43
	Barium (and compounds)	<0.001	<0.001	0.001
	Benzene	<0.001	<0.001	<0.01
	Formaldehyde	0.003	0.003	0.01
	n-Hexane	0.06	0.06	0.28
	Nickel (and compounds)	<0.001	<0.001	0.001
	Toluene	<0.001	<0.001	<0.01
	Zinc (and compounds)	0.002	0.002	0.01
EQT 0005 B7801C	Ammonia	0.33	0.33	1.43
	Barium (and compounds)	<0.001	<0.001	0.001
	Benzene	<0.001	<0.001	<0.01
	Formaldehyde	0.003	0.003	0.01
	n-Hexane	0.06	0.06	0.28
	Nickel (and compounds)	<0.001	<0.001	0.001
	Toluene	<0.001	<0.001	<0.01
	Zinc (and compounds)	0.002	0.002	0.01

**EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site

Activity Number: PER20220001

Permit Number: 0180-00233-V0

Air - Title V Regular Permit Initial

All phases

Subject Item	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0006 L6104	n-Hexane	<0.001	0.01	<0.01
EQT 0007 B5701	Ammonia	0.89	0.89	3.92
	Formaldehyde	0.02	0.02	0.08
	Methanol	0.17	0.17	0.73
EQT 0008 L7402	Ammonia	1.05	1.24	4.58
	Chromium VI (and compounds)	0.003	0.006	0.013
	Formaldehyde	0.001	0.01	0.004
	Methanol	0.07	0.22	0.30
	Methyl methacrylate	0.003	0.08	0.01
	Nickel (and compounds)	0.003	0.005	0.012
EQT 0009 H7401	Barium (and compounds)	<0.001	0.003	0.001
	Benzene	<0.001	0.002	<0.01
	Formaldehyde	0.01	0.23	0.05
	Methanol	0.58	23.02	2.53
	Methyl methacrylate	0.03	9.70	0.14
	n-Hexane	0.12	1.32	0.52
	Nickel (and compounds)	<0.001	0.002	0.001
	Toluene	<0.001	0.002	<0.01
	Zinc (and compounds)	0.002	0.02	0.01
EQT 0011 L7530	Ammonia	<0.001	<0.001	<0.01
	Formaldehyde	0.003	0.01	0.01
	Hydrogen cyanide	<0.001	<0.001	<0.01
	Methanol	0.01	0.04	0.05
	Methyl methacrylate	0.03	0.12	0.12
EQT 0013 F7618A	Ammonia	0.01	0.34	0.03
	Methanol	<0.001	0.01	<0.01
EQT 0014 F7618B	Ammonia	0.01	0.34	0.03
	Methanol	<0.001	0.01	<0.01
EQT 0015 F7501	Ammonia	<0.001	<0.001	<0.01
	Formaldehyde	<0.001	<0.001	<0.01
	Hydrogen cyanide	<0.001	<0.001	<0.01
	Methanol	<0.001	<0.001	<0.01
	Methyl methacrylate	<0.001	0.001	<0.01
FUG 0001 MCA-FUG	Ammonia	0.09	0.09	0.38
	Formaldehyde	0.05	0.05	0.22
	Methanol	1.58	1.58	6.94
	Methyl methacrylate	0.70	0.70	3.07
UNF 0001 AI-234532	1,4-Dichlorobenzene			0.01
	Ammonia			21.56
	Barium (and compounds)			0.013
	Benzene			0.01
	Cadmium (and compounds)			0.002
	Chromium VI (and compounds)			0.016
	Copper (and compounds)			0.001
	Formaldehyde			0.47
	Hydrogen cyanide			0.01
	Manganese (and compounds)			0.01
	Methanol			12.76
	Methyl methacrylate			3.35

**EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site

Activity Number: PER20220001

Permit Number: 0180-00233-V0

Air - Title V Regular Permit Initial

All phases

Subject Item	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
	n-Hexane			3.02
	Naphthalene			0.01
	Nickel (and compounds)			0.018
	Toluene			0.01
	Zinc (and compounds)			0.09

Note: Emission rates associated with alternate operating scenarios (SCN) are not included in permitted totals unless otherwise noted in a footnote.

Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

For Part 70 sources, the pound per hour and ton per year emission limits established in this "Emission Rates for TAP/HAP & Other Pollutants" section of the permit are state-only unless otherwise noted.

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**CRG 0001 63-DDDDD - 40 CFR 63 Subpart DDDDD Requirements**

Group Members: EQT 0001 EQT 0003 EQT 0004 EQT 0005 EQT 0006

- 1 [40 CFR 63.7500(a)(1)]  
Conduct a tune-up every 5 years as specified in 40 CFR 63.7540. Subpart DDDDD. [40 CFR 63.7500(a)(1), 40 CFR 63.7530(h), 40 CFR 63.7540(a)(12)]
- 2 [40 CFR 63.7500(a)(3)]  
Operate and maintain at all times any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Subpart DDDDD. [40 CFR 63.7500(a)(3)]
- 3 [40 CFR 63.7505(a)]  
Be in compliance with the emission limits, work practice standards, and operating limits in 40 CFR 63 Subpart DDDDD at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f). Subpart DDDDD. [40 CFR 63.7505(a)]
- 4 [40 CFR 63.7515(d)]  
Conduct a 5-year performance tune-up according to 40 CFR 63.7540(a)(12). Ensure that each 5-year tune-up specified in 40 CFR 63.7540(a)(12) is conducted no more than 61 months after the previous tune-up. Ensure that the first 5-year tune-up is no later than 61 months after the initial startup of the heaters. Subpart DDDDD. [40 CFR 63.7515(d)]
- 5 [40 CFR 63.7530(g)]  
Conduct an initial fuel specification analyses according to 40 CFR 63.7521(f) through (i) and according to the frequency listed in 40 CFR 63.7540(c) and maintain records of the results of the testing as outlined in 40 CFR 63.7555(g), if electing to demonstrate that a gaseous fuel meets the specifications of another gas 1 fuel as defined in 40 CFR 63.7575. Include a signed certification with the Notification of Compliance Status that the initial fuel specification test meets the gas specification outlined in the definition of other gas 1 fuels, for samples where the initial mercury specification has not been exceeded. Subpart DDDDD. [40 CFR 63.7530(g)]
- 6 [40 CFR 63.7540(a)(13)]  
Conduct the tune-up within 30 calendar days of startup, if the unit is not operating on the required date for a tune-up. Subpart DDDDD. [40 CFR 63.7540(a)(13)]
- 7 [40 CFR 63.7545(c)]  
Submit Initial Notification: Due to DEQ not later than 15 days after the actual date of startup of the affected source, as specified in 40 CFR 63.9(b)(4) and (b)(5). Subpart DDDDD. [40 CFR 63.7545(c)]
- 8 [40 CFR 63.7550(h)(3)]  
Submit all reports required by 40 CFR 63 Subpart DDDDD. Table 9 electronically to the EPA via the CEDRI. (CEDRI is accessed through the EPA's Central Data Exchange (CDX).) Use the appropriate electronic report in CEDRI for 40 CFR 63 Subpart DDDDD. An alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<https://www.epa.gov/cedri/>) may be submitted once the XML schema is available, instead of using the electronic report in CEDRI for 40 CFR 63 Subpart DDDDD. Submit the report to the EPA at the appropriate address listed in 40 CFR 63.13, if the reporting form specific to 40 CFR 63 Subpart DDDDD is not available in CEDRI at the time that the report is due. Begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. Subpart DDDDD. [40 CFR 63.7550(h)(3)]
- 9 [40 CFR 63.7550]  
Submit compliance status report. Due semiannually, by the 31st of January and July, according to the requirements in 40 CFR 63.7550(b). Submit the information specified in 40 CFR 63.7550(c)(1) through (c)(5), as applicable. Include the information specified in 40 CFR 63.7550(d)(1) through (d)(3) for each deviation from an emission limit or operating limit in 40 CFR 63 Subpart DDDDD that occurs where a CMS is not being used to comply with that emission limit or operating limit and/or for each deviation from the work practice standards for periods of startup and shutdown. Include the information in 40 CFR 63.7550(e)(1) through (e)(9) for each deviation from an emission limit, operating limit, and monitoring requirement in 40 CFR 63 Subpart DDDDD that occurs where a CMS is being used to comply with that emission limit or operating limit. Subpart DDDDD.
- 10 [40 CFR 63.7555]  
Equipment operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in 40 CFR 63.7555(a) through (h), as applicable. Subpart DDDDD.
- 11 [40 CFR 63.7560(a)]  
Keep records in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). Subpart DDDDD. [40 CFR 63.7560(a)]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**CRG 0001 63-DDDDD - 40 CFR 63 Subpart DDDDD Requirements**

Group Members: EQT 0001 EQT 0003 EQT 0004 EQT 0005 EQT 0006

- 12 [40 CFR 63.7560(b)] Keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, as specified in 40 CFR 63.10(b)(1). Subpart DDDDD. [40 CFR 63.7560(b)]
- 13 [40 CFR 63.7560(c)] Keep each record on site, or ensure that they are accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The remaining 3 years may be kept offsite. Subpart DDDDD. [40 CFR 63.7560(c)]

**CRG 0002 63G-GR1+2103 - 40 CFR 63 Subpart G Group 1 + LAC 33:III.2103 Storage Vessels**

Group Members: EQT 0022 EQT 0025 EQT 0028 EQT 0029 EQT 0030 EQT 0031 EQT 0032

- 14 [40 CFR 63.119(a)(1)] Operate and maintain a closed-vent system and control device meeting the requirements specified in 40 CFR 63.119(e). Subpart G. [40 CFR 63.119(a)(1)]
- 15 [40 CFR 63.122(a)(1)] Submit an Initial Notification as required by 40 CFR 63.151(b). Subpart G. [40 CFR 63.122(a)(1)]
- 16 [40 CFR 63.122(a)(3)] Submit a Nonfication of Compliance Status as required by 40 CFR 63.152(b). Include the information specified in 40 CFR 63.122(c). Subpart G. [40 CFR 63.122(a)(3)]
- 17 [40 CFR 63.122(a)(4)] Submit Periodic Reports as required by 40 CFR 63.152(c). Include the information specified in 40 CFR 63.122(d), (e), (f), and (g).
- 18 [40 CFR 63.122(a)(5)] Subpart G. [40 CFR 63.122(a)(4)]
- 19 [40 CFR 63.122(a)(5)] Submit, as applicable, other reports as required by 40 CFR 63.152(d). Include the information specified in 40 CFR 63.122(h). Subpart G. [40 CFR 63.122(a)(5)]
- 20 [LAC 33:III.2103.B] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records of the information specified in 40 CFR 63.123(a). Keep the records as long as the storage vessel retains Group 1 status and is in operation. Subpart G.
- 21 [LAC 33:III.2103.E.] The tanks (except EQT0029) shall be equipped with submerged fill pipes. Emissions from each tank shall be routed to a closed vent system and a vapor loss control device that reduce inlet emissions of total VOCs by 95 percent or greater.
- 22 [LAC 33:III.2103.E] Equip with a vapor loss control system that consists of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. Ensure that all tank gauging and sampling devices are gas-tight except when gauging or sampling is taking place.
- 23 [LAC 33:III.2103.H.3] Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3-a.
- 24 [LAC 33:III.2103.J] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 through I.7, as applicable. Maintain records for at least two years. Subpart Dc. [40 CFR 60.48c(g)(2)]
- 25 [LAC 33:III.509] Vents shall be routed through a closed vent system (vapor collection system) to a thermal oxidizer / scrubber as BACT for VOC emissions.

**CRG 0003 HEATERS - Common Requirements for Heaters**

Group Members: EQT 0003 EQT 0004 EQT 0005

- 26 [40 CFR 60.48c(a)] Submit notification: Due as specified in 40 CFR 60.7. Submit the date of construction or reconstruction and actual startup. Include the information specified in 40 CFR 60.48c(a)(1) through (a)(4) as applicable. Subpart Dc. [40 CFR 60.48c(a)]
- 27 [40 CFR 60.48c(g)(2)] Fuel rate recordkeeping by electronic or hard copy monthly. Keep records of the amount of each fuel combusted during each calendar month. Subpart Dc. [40 CFR 60.48c(g)(2)]

**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

## **SPECIFIC REQUIREMENTS**

### **CRG 0003 HEATERS - Common Requirements for Heaters**

**Group Members: EQT 0003 EQT 0004 EQT 0005**

- 28 [40 CFR 60.48c(i)] Maintain all records required under 40 CFR 60.48c for a period of 2 years following the date of such record. Subpart Dc. [40 CFR 60.48c (i)]
  - 29 [40 CFR 63.7500] Shall comply with 40 CFR 63 Subpart DDDDD as specified in CRG0001.
  - 30 [LAC 33:III.1313.C] Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel). Which Months: All Year Statistical Basis: None specified
- 31 [LAC 33:III.2201.H.2.a.i] Fuel monitored by totalizer continuously. Monitor fuel usage with a totalizing fuel meter. Which Months: May-Sep Statistical Basis: Thirty-day rolling average Oxygen monitored by the regulation's specified method(s) continuously. Monitor oxygen concentration with an oxygen monitor. Which Months: May-Sep Statistical Basis: Thirty-day rolling average
- 32 [LAC 33:III.2201.H.2.a.ii] Operate the process heater/furnace within the fuel and oxygen limits established during the initial compliance run.
- 33 [LAC 33:III.2201.H.2.a.iii] Submit report: Due to DEQ within 90 days of the end of each ozone season for any noncompliance with the applicable limitations of LAC 33:III.2201.D or E or with the applicable work practice standards of LAC 33:III.2201.K.3. Include the information specified in LAC 33:III.2201.1.2.a through 1.2.d.
- 34 [LAC 33:III.2201.I.2] Permittee shall maintain records of all continuous monitoring, performance test results, hours of operation, and fuel usage rates for each heater. Such records shall be kept for a period of at least five years and shall be made available upon request by authorized representatives of the LDEQ. The emission monitoring (as applicable) and fuel usage records for each heater source shall be recorded and maintained as specified in LAC 33:III.2201.I.3 a through c.
- 35 [LAC 33:III.2201.1.3] In lieu of compliance with applicable requirements of LAC 33:III.2201, permittee may comply with an LDEQ approved alternative NOx monitoring, recordkeeping, and reporting (MRR) plan.
- 36 [LAC 33:III.501.C.6] During the startup and shutdown period, NOx emissions shall be limited to 7.30 lbs/hr and CO emissions to 26.81 lbs/hr. During the SCR maintenance period, NOx emissions shall be limited to 7.30 lbs/hr.
- 37 [LAC 33:III.509] Permittee shall monitor and record NOx emissions using Continuous Emissions Monitoring Systems (CEMS) which are calibrated, operated, and maintained according to the manufacturer's specifications and the following requirements:
- a. Comply with 40 CFR Part 60, Appendix B, Performance Specification 2.
- b. Evaluate in accordance with Procedure 1 of 40 CFR 60, Appendix F.
- c. Data availability as specified by Part 70 General Condition V of LAC 33:III.535.A.
- d. NO<sub>2</sub>/NOx in-stack ratio determination in conjunction with Performance Specification 2.

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**CRG 0003 HEATERS - Common Requirements for Heaters**

Group Members: EQT 0003 EQT 0004 EQT 0005

39 [LAC 33:III.509]

Shall comply with the following BACT:

- Use of gaseous fuels in combination with good combustion practices and proper burner design to limit PM10/PM2.5 emissions to no more than 0.0075 lb/MM BTU;
- Utilize LNB + SCR during normal operation to limit NO<sub>x</sub> <= 0.01 lb/MM BTU (annual average) and LNB during startups and shutdowns for no more than 100 hours/year to limit NO<sub>x</sub> <= 0.10 lb/MM BTU. SCR maintenance shall last no more than 36 hours to limit NO<sub>x</sub> <= 0.10 lb/MM BTU;
- Utilize oxidation catalyst in combination with good combustion practices, proper equipment design and operation, and compliance with 40 CFR 63 Subpart DDDDD to limit CO <= 5 ppmvd (hourly average, normal operation);
- Good combustion practices, proper equipment design and operation, and compliance with 40 CFR 63 Subpart DDDDD to limit CO <= 500 ppmvd (hourly average, startups/shutdown <= 100 hours/year);
- Utilize CO oxidation catalyst, good combustion practices, proper equipment design and operation, and compliance with 40 CFR 63 Subpart DDDDD to limit VOC <= 0.0027 lb/MM BTU (three 1-hour average); and
- Utilize low carbon intensity gaseous fuels, good combustion and operating practices, and efficiency improvement measures to minimize GHG emissions.

**CRG 0004 BACT - Common BACT Requirement**

Group Members: EQT 0034 EQT 0035 EQT 0037 EQT 0038 EQT 0039 EQT 0040 EQT 0041 EQT 0044 EQT 0045 EQT 0046 EQT 0047 EQT 0048 EQT 0049 EQT 0050

40 [40 CFR 63.113(a)(1 or 2)] EQT 0039, EQT 0040, EQT 0044 through EQT 0050: Reduce emissions of organic HAP using a thermal oxidizer or a flare or maintain Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). Subpart G. [40 CFR 63.113(a)(1 or 2)]

Which Months: All Year Statistical Basis: None specified

41 [LAC 33:III.2115.1.4] EQT 0038 and EQT 0041: Equipment/operational data recordkeeping by electronic or hard copy as needed. Maintain records to demonstrate that the criteria are being met for any exemption claimed. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request.

42 [LAC 33:III.509] Vents shall be routed through a closed vent system (vapor collection system) to a flare or a thermal oxidizer as BACT for VOC emissions.

**CRG 0005 63G-GR1 - 40 CFR 63 Subpart G Group 1 Storage Vessels**

Group Members: EQT 0019 EQT 0020 EQT 0023 EQT 0024 EQT 0027

- 43 [40 CFR 63.119(a)(1)] Operate and maintain a closed-vent system and control device meeting the requirements specified in 40 CFR 63.119(e). Subpart G. [40 CFR 63.119(a)(1)]
- 44 [40 CFR 63.122(a)(1)] Submit an Initial Notification as required by 40 CFR 63.151(b). Subpart G. [40 CFR 63.122(a)(1)]
- 45 [40 CFR 63.122(a)(3)] Submit a Notification of Compliance Status as required by 40 CFR 63.152(b). Include the information specified in 40 CFR 63.122(c). Subpart G. [40 CFR 63.122(a)(3)]
- 46 [40 CFR 63.122(a)(4)] Submit Periodic Reports as required by 40 CFR 63.152(c). Include the information specified in 40 CFR 63.122(d), (e), (f), and (g). Subpart G. [40 CFR 63.122(a)(4)]

**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER20220001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

### **SPECIFIC REQUIREMENTS**

#### **CRG 0005 63G-GR1 - 40 CFR 63 Subpart G Group 1 Storage Vessels**

Group Members: EQT 0019 EQT 0020 EQT 0023 EQT 0024 EQT 0027

- 47 [40 CFR 63.122(a)(5)] Submit, as applicable, other reports as required by 40 CFR 63.152(d). Include the information specified in 40 CFR 63.122(h). Subpart G.
- [40 CFR 63.122(a)(5)] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records of the information specified in 40 CFR 63.123(a). Keep the records as long as the storage vessel retains Group 1 status and is in operation. Subpart G.
- 48 [40 CFR 63.123] Vents shall be routed through a closed vent system (vapor collection system) to a thermal oxidizer / scrubber as BACT for VOC emissions.
- 49 [LAC 33.III.509]

#### **CRG 0006 63G-GR2WW - 40 CFR 63 Subpart G Group 2 Wastewater Tanks**

Group Members: EQT 0011 EQT 0013 EQT 0014 EQT 0015

- 50 [40 CFR 63.146(b)(1)] For Group 2 wastewater streams, the permittee shall include the following information [(i) through (iv)] in the Notification of Compliance Status Report. This information may be submitted in any form. Table 15 of 40 CFR 63 Subpart G is an example.
  - (i) Process unit identification and description of the process unit.
  - (ii) Stream identification code.
  - (iii) Concentration of 40 CFR 63 Subpart G - Table 8 and/or Table 9 compound(s) in parts per million, by weight. Include documentation of the methodology used to determine concentration.
  - (iv) Flow rate in liter per minute. [40 CFR 63.146(b)(1)]
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records specified in 40 CFR 63.147(b)(8), as applicable. Subpart G. [40 CFR 63.147(b)(8)]
- 51 [40 CFR 63.147(b)(8)] Shall comply with applicable provisions of 40 CFR 63 Subpart G for Group 2 wastewater storage tanks as BACT.

#### **EQT 0001 B6109 - CO MeOH Auxiliary Boiler**

53 [40 CFR 60.44b(1)(2)]

54 [40 CFR 60.446(b)(c)]

55 [40 CFR 60.448(b)(1)]

- Nitrogen oxides (NO<sub>x</sub>) <= 0.13 lb/MMBTU (43 ng/J) heat input (expressed as NO<sub>2</sub>). The nitrogen oxide standards apply at all times, including periods of startup, shutdown, or malfunction. Subpart Db. [40 CFR 60.44b(1)(2)]
  - Which Months: All Year Statistical Basis: One-hour average
  - Determine compliance with the NO<sub>x</sub> standards in 40 CFR 60.44b through performance testing under 40 CFR 60.46b(e). Subpart Db. [40 CFR 60.46b(c)]
  - Nitrogen oxides (NO<sub>x</sub>) monitored by CMS continuously. Calculate nitrogen oxides emission rates as specified in 40 CFR 60.48b(d).
    - Subpart Db. [40 CFR 60.48b(b)(1)]
    - Which Months: All Year Statistical Basis: One-hour average
    - Nitrogen oxides (NO<sub>x</sub>) recordkeeping by CMS continuously. Subpart Db. [40 CFR 60.48b(b)(1)]
    - Oxygen or Carbon dioxide monitored by CMS continuously. Subpart Db. [40 CFR 60.48b(b)(1)]
    - Which Months: All Year Statistical Basis: One-hour average
    - Oxygen or Carbon dioxide recordkeeping by CMS continuously. Subpart Db. [40 CFR 60.48b(b)(1)]
    - Operate NO<sub>x</sub> continuous monitoring systems and record data during all periods of operation except for continuous monitoring system breakdowns and repairs. Record data during calibration checks, and zero and span adjustments. Subpart Db. [40 CFR 60.48b(c)]
    - The 1-hour average NO<sub>x</sub> emission rates measured by the continuous NO<sub>x</sub> monitor required by 40 CFR 60.48(b) and required under § 60.13 (b) shall be expressed in ng/J or lb/MMBTu heat input and shall be used to calculate the average emission rates under § 60.44b. The 1-hour averages shall be calculated using the data points required under § 60.13(h)(2). [40 CFR 60.48b(d)]

**SPECIFIC REQUIREMENTS**  
**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**

**Activity Number: PER20220001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**EQT\_0001\_B6109 - CO MeOH Auxiliary Boiler**

- 61 [40 CFR 60.48b(e)]  
Follow the procedures under 40 CFR 60.13 and 40 CFR 60.48b(e)(1) through (e)(3) for installation, evaluation, and operation of the NOX and opacity continuous monitoring systems. Subpart Db. [40 CFR 60.48b(e)]
- 62 [40 CFR 60.48b(f)]  
When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, obtain emission data by using standby monitoring systems, 40 CFR 60, Appendix A, Method 7, Method 7a, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. Subpart Db. [40 CFR 60.48b(f)]
- 63 [40 CFR 60.49b(a)]  
Submit notification: Due as provided by 40 CFR 60.7. Submit a notification of the actual date of initial startup including design heat input capacity of the affected facility, identification of fuels to be combusted, copy of any federally enforceable requirement limiting annual capacity factor, and all other data as specified in 40 CFR 60.49b(a)(1) through (a)(4). Subpart Db. [40 CFR 60.49b(a)]
- Submit the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in 40 CFR 60 Appendix B to DEQ. Subpart Db. [40 CFR 60.49b(b)]
- Fuel rate recordkeeping by electronic or hard copy daily. Record the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. Determine the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. If the facility is not required to continuously monitor any emissions (excluding opacity) or parameters indicative of emissions, the facility may record the amount of each fuel combusted during each calendar month. Subpart Db. [40 CFR 60.49b(d)]
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records of the information listed in 40 CFR 60.49b(g)(1) through (g)(10) for each steam generating unit operating day, except as provided under 40 CFR 60.49b(p). Subpart Db. [40 CFR 60.49b(g)]
- Submit excess emissions report: Due by the 30th day following the end of each six-month period. Report any excess emissions which occurred during the reporting period. Subpart Db. [40 CFR 60.49b(h)]
- 64 [40 CFR 60.49b(b)]  
Submit reports containing the nitrogen dioxide emission rate information recorded under 40 CFR 60.49b(g). Subpart Db. [40 CFR 60.49b]
- 65 [40 CFR 60.49b(d)]  
(i) Maintain all records required under 40 CFR 60.49b for a period of 2 years following the date of such record. Subpart Db. [40 CFR 60.49b]
- (o) The permittee shall obtain and maintain at the affected facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b and the applicable sulfur limit. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period. [40 CFR 60.49b(r)(1)]
- The reporting period for the reports required under 40 CFR 60 Subpart Db is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR 60.49b(w)]
- 66 [40 CFR 60.49b(g)]  
Total Organic Compounds (less methane and ethane) >= 98 % reduction by weight, or to a TOC (less methane and ethane) concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen, whichever is less stringent. The vent stream shall be introduced into the flame zone of the boiler. Subpart NNN. [40 CFR 60.662(a)]
- Which Months: All Year Statistical Basis: None specified  
Shall monitor and record flow rate of vent stream from each distillation unit to the boiler at least once every hour. [40 CFR 60.663(c)(1)]
- 67 [40 CFR 60.49b(h)]  
Monitor and record the periods of operation of the boiler. [40 CFR 60.663(d)]
- 68 [40 CFR 60.49b(i)]
- 69 [40 CFR 60.49b(o)]
- 70 [40 CFR 60.49b(r)(1)]
- 71 [40 CFR 60.49b(w)]
- 72 [40 CFR 60.662(a)]
- 73 [40 CFR 60.663(c)(1)]
- 74 [40 CFR 60.663(d)]

**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**SPECIFIC REQUIREMENTS**

**EQT\_0001\_B6109 - CO MeOH Auxiliary Boiler**

75 [40 CFR 60.665(a)] Notify the DEQ with the specific provisions of 40 CFR 60.662 (40 CFR 60.662(a), (b), or (c)) with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.662 that the operator elects to comply with . Conduct the performance test specified by 40 CFR 60.664 within 180 days after the change. Subpart NNN. [40 CFR 60.665(a)]

Performance Test Data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain up-to-date, readily accessible records of the required compliance information listed in 40 CFR 60.665(b) through (j) as applicable measured during each performance test required under 40 CFR 60.8. Submit the same specified data in the reports of all subsequently required performance tests where either the emission control efficiency of a control device, outlet concentration of TOC, or the TRE index value of a vent stream from a recovery system is determined. Subpart NNN. [40 CFR 60.665(b)]

Submit a report containing the information in 40 CFR 60.665(b)(2)(i). Subpart NNN. [40 CFR 60.665(b)]

Permittee shall keep up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored under 40 CFR 60.663(c) as well as up-to-date, readily accessible records of periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The Administrator may at any time require a report of these data. Periods of operation during which the parameter boundaries established during the most recent performance tests are exceeded are defined as whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under § 60.662(a). [40 CFR 60.665(c)(4)]

Permittee shall keep up to date, readily accessible continuous records of the flow indication specified under 40 CFR 60.663(a)(2), § 60.663(b)(2) and § 60.663(c)(1), as well as up-to-date, readily accessible records of all periods when the vent stream is diverted from the control device or has no flow rate. [40 CFR 60.665(d)]

Permittee shall keep an up-to-date, readily accessible record of all periods of operation of the boiler. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State or Federal regulatory requirements.). [40 CFR 60.665(e)]

Submit report: Due semiannually. Submit initial report within 6 months after the initial start-up date. Include the information outlined in 40 CFR 60.665(l)(2) and (l)(3). Subpart NNN. [40 CFR 60.665(l)]

Total Organic Compounds (less methane and ethane) >= 98 % reduction by weight, or to a TOC (less methane and ethane) concentration of 20 ppmv. on a dry basis corrected to 3 percent oxygen, whichever is less stringent. The vent stream shall be introduced into the flame zone of the boiler. Subpart RRR. [40 CFR 60.702(a)]

Which Months: All Year Statistical Basis: None specified

Permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow diverted from being routed to the boiler at least once every 15 minutes, except as provided in 40 CFR 60.703(c)(1)(ii). [40 CFR 60.703(c)(1)]

Notify the DEQ with the specific provisions of 40 CFR 60.702 (40 CFR 60.702(a), (b), or (c)) with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.702 that the operator elects to make. Conduct the performance test specified by 40 CFR 60.704 within 180 days after the change. Subpart RRR. [40 CFR 60.705(a)]

Submit a report containing the information in 40 CFR 60.705(b)(2)(i). [40 CFR 60.705(b)]

85 [40 CFR 60.705(b)]

**SPECIFIC REQUIREMENTS**  
**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**

**Activity Number: PER2022001  
 Permit Number: 0180-00233-Y0  
 Air - Title V Regular Permit Initial**

**EQT\_0001\_B6109 - CO MeOH Auxiliary Boiler**

86 [40 CFR 60.705(c)(4)]

Permittee shall keep up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored under 40 CFR 60.705(c) as well as up-to-date, readily accessible records of periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The Administrator may at any time require a report of these data.

Periods of operation during which the parameter boundaries established during the most recent performance tests are exceeded are defined as whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under § 60.702(a). [40 CFR 60.705(c)(4)]

Permittee shall keep records of the following:

(1) Up-to-date, readily accessible continuous records of the flow indication specified under 40 CFR 60.703(a)(2)(i), § 60.703(b)(2)(i) and § 60.703(c)(1)(i), as well as up-to-date, readily accessible records of all periods and the duration when the vent stream is diverted from the control device.

(2) Where a seal mechanism is used to comply with § 60.703(a)(2)(ii), § 60.703(b)(2)(ii), and § 60.703(c)(1)(ii), a record of continuous flow is not required. In such cases, the owner or operator shall keep up-to-date, readily accessible records of all monthly visual inspections of the seals as well as readily accessible records of all periods and the duration when the seal mechanism is broken, the bypass line valve position has changed, the serial number of the broken car-seal has changed, or when the key for a lock-and-key type configuration has been checked out. [40 CFR 60.705(d)]

Submit reports: Due semiannually. Submit the initial semiannual report to the DEQ within 6 months after the initial start-up date. Include the information outlined in 40 CFR 60.705(l)(2) and (l)(7), as applicable. Subpart RRR. [40 CFR 60.705(l)]

Permittee shall maintain on file a schematic diagram of the affected vent streams, collection system(s), fuel systems, control devices, and bypass systems as part of the initial report. This schematic diagram must be retained for the life of the system. [40 CFR 60.705(s)]

Shall comply with 40 CFR 63 Subpart DDDDD as specified in CRG0001.

Total suspended particulate <= 0.6 lb/MMBTU of heat input.

Which Month: All Year Statistical Basis: None specified

During the startup and shutdown period, NOx emissions shall be limited to 41.73 lbs/hr and CO emissions to 117.89 lbs/hr. During the SCR maintenance period, NOx emissions shall be limited to 41.73 lbs/hr.

Permittee shall monitor and record NOx and CO emissions using Continuous Emissions Monitoring Systems (CEMS) which are calibrated, operated, and maintained according to the manufacturer's specifications and the following requirements:

- a. NOx: Comply with 40 CFR Part 60, Appendix B, Performance Specification 2.
- b. CO: Comply with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4A, as applicable.
- c. Evaluate in accordance with Procedure 1 of 40 CFR 60, Appendix F.
- d. Data availability as specified by Part 70 General Condition V of LAC 33:II.535.A.
- e. NO<sub>2</sub>/NOx in-stack ratio determination in conjunction with Performance Specification 2.

87 [40 CFR 60.705(d)]

88 [40 CFR 60.705(l)]

89 [40 CFR 60.705(s)]

90 [40 CFR 63.7500]

91 [LAC 33:III.1313.C]

92 [LAC 33:III.509]

93 [LAC 33:II.509]

**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**EQT 0001 B6109 - CO MeOH Auxiliary Boiler**

94 [LAC 33:II1.509]

Shall comply with the following BACT:

- Use of gaseous fuels in combination with good combustion practices and proper burner design to limit PM10/PM2.5 emissions to no more than 0.0075 lb/MM BTU;
- Utilize LNB + SCR during normal operation to limit NOx <= 0.015 lb/MM BTU (30 day rolling average); SCR maintenance shall last no more than 36 hours where NOx <= 0.13 lb/MM BTU;
- Utilize oxidation catalyst in combination with good combustion practices, proper equipment design and operation , and compliance with 40 CFR 63 Subpart DDDDD during normal operation to limit CO <= 10 ppmv (hourly average) and CO <= 5 ppmv (annual average);
- Good combustion practices, proper equipment design and operation, and compliance with 40 CFR 63 Subpart DDDDD to limit CO <= 500 ppmv (hourly average, startups/shutdown <= 100 hours/year);
- Utilize CO oxidation catalyst, good combustion practices, proper equipment design and operation, and compliance with 40 CFR 63 Subpart DDDDD to limit VOC <= 0.027 lb/MM BTU (natural gas) or VOC <= 0.036 lb/MM BTU (fuel gas) (three 1-hour average); and
- Utilize low carbon intensity gaseous fuels, good combustion and operating practices, and efficiency improvement measures to minimize GHG emissions.

**EQT 0002 B6101 - CO MeOH Fired Heater**

95 [40 CFR 60.662(a)]

Total Organic Compounds (less methane and ethane) >= 98 % reduction by weight, or to a TOC (less methane and ethane) concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen, whichever is less stringent. Subpart NNN. [40 CFR 60.662(a)]

Which Months: All Year Statistical Basis: None specified

- Shall monitor and record flow rate of vent stream from each distillation unit to the heater at least once every hour. [40 CFR 60.663(c)(1)]
- Monitor and record firebox temperature continuously using a continuous monitoring system (CMS) with an accuracy of +/- 1 % of the temperature being measured expressed in degrees Celsius or +/- 0.5 deg C, whichever is greater. [40 CFR 60.663(c)(2)]
- Run all affected facilities at full operating conditions and flow rates during any performance test intended to demonstrate compliance with 40 CFR 60.662. Subpart NNN. [40 CFR 60.664(a)]
- Use the 40 CFR 60 appendix A methods listed in 40 CFR 60.664(b), except as provided under 40 CFR 60.8(b), as reference methods to determine compliance with the emission limit or percent reduction efficiency specified under 40 CFR 60.662(a). Subpart NNN. [40 CFR 60.664(b)]

Notify the DEQ with the specific provisions of 40 CFR 60.662 (40 CFR 60.662(a), (b), or (c)) with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.662 that the operator elects to comply with. Conduct the performance test specified by 40 CFR 60.664 within 180 days after the change. Subpart NNN. [40 CFR 60.665(a)]

Performance Test Data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain up-to-date, readily accessible records of the required compliance information listed in 40 CFR 60.665(b)(2) measured during each performance test required under 40 CFR 60.8. Submit the same specified data in the reports of all subsequently required performance tests where either the emission control efficiency of a control device, outlet concentration of TOC, or the TRE index value of a vent stream from a recovery system is determined. Subpart NNN. [40 CFR 60.665(b)]

Submit a report containing the information in 40 CFR 60.665(b)(2). Subpart NNN. [40 CFR 60.665(b)]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**EQT 0002 B6101 - CO MeOH Fired Heater**

103 [40 CFR 60.665(c)(3)]  
 Permittee shall keep up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored under 40 CFR 60.663(c) as well as up-to-date, readily accessible records of periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The Administrator may at any time require a report of these data. Periods of operation during which the parameter boundaries established during the most recent performance tests are exceeded are defined as all 3-hour periods of operation during which the average combustion temperature was more than 28 degrees Celsius (50 degrees Fahrenheit) below the average combustion temperature during the most recent performance test at which compliance with § 60.662(a) was determined for boilers or process heaters with a design heat input capacity of less than 44 MW (150 million Btu/hr). [40 CFR 60.665(c)(3)]

104 [40 CFR 60.665(c)]  
 Permittee shall keep up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored under 40 CFR 60.663(c) as well as up-to-date, readily accessible records of periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The Administrator may at any time require a report of these data. Periods of operation during which the parameter boundaries established during the most recent performance tests are exceeded are defined as whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under § 60.662(a). [40 CFR 60.665(c)(4)]

105 [40 CFR 60.665(d)]  
 Permittee shall keep up to date, readily accessible continuous records of the flow indication specified under 40 CFR 60.663(a)(2), § 60.663(b)(2) and § 60.663(c)(1), as well as up-to-date, readily accessible records of all periods when the vent stream is diverted from the control device or has no flow rate. [40 CFR 60.665(d)]

106 [40 CFR 60.665(l)]  
 Submit report: Due semiannually. Submit initial report within 6 months after the initial start-up date. Include the information outlined in 40 CFR 60.665(l)(1) through (l)(3). Subpart NNN. [40 CFR 60.665(l)]

107 [40 CFR 60.702(a)]  
 Total Organic Compounds (less methane and ethane) >= 98 % reduction by weight, or to a TOC (less methane and ethane) concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen, whichever is less stringent. Subpart RRR. [40 CFR 60.702(a)]  
 Which Months: All Year Statistical Basis: None specified

108 [40 CFR 60.703(c)(1)]  
 Permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow diverted from being routed to the heater at least once every 15 minutes, except as provided in 40 CFR 60.703(c)(1)(iii). [40 CFR 60.703(c)(1)]

109 [40 CFR 60.703(c)(3)]  
 Permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a temperature monitoring device in the firebox equipped with a continuous recorder and having an accuracy of plus or minus 1 percent of the temperature being monitored expressed in degrees Celsius or plus or minus 0.5 degree Celsius, whichever is greater. Any vent stream introduced with primary fuel into a boiler or process heater is exempt from this requirement. [40 CFR 60.703(c)(3)]  
 Run all affected facilities at full operating conditions and flow rates during any performance test intended to demonstrate compliance with 40 CFR 60.702. Subpart RRR. [40 CFR 60.704(a)]  
 Determine compliance with 40 CFR 60.702 using the methods listed in 40 CFR 60.704(b), except as provided under 40 CFR 60.8(b). Subpart RRR. [40 CFR 60.704(b)]

110 [40 CFR 60.704(a)]  
 Notify the DEQ with the specific provisions of 40 CFR 60.702 (40 CFR 60.702(a), (b), or (c)) with which the facility operator has elected to comply. Submit the notification with the notification of initial start-up required in 40 CFR 60.7(a)(3). Notify the DEQ 90 days before implementing any change in the provision of 40 CFR 60.702 that the operator elects to make. Conduct the performance test specified by 40 CFR 60.704 within 180 days after the change. Subpart RRR. [40 CFR 60.705(a)]

**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

### **SPECIFIC REQUIREMENTS**

#### **EQT 0002 B6101 - CO MeOH Fired Heater**

113 [40 CFR 60.705(b)]

Performance Test Data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain up-to-date, readily accessible records of the required compliance information listed in 40 CFR 60.705(b)(2) measured during each performance test required under 40 CFR 60.8. Submit the same specified data in the reports of all subsequently required performance tests where either the emission control efficiency of a control device, outlet concentration of TOC, or the TRE index value of a vent stream from a recovery system is determined. Subpart RRR. [40 CFR 60.705(b)]

114 [40 CFR 60.705(b)]

Submit a report containing the information in 40 CFR 60.705(b)(2). [40 CFR 60.705(b)]  
 Permittee shall keep up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored under 40 CFR 60.703(c) as well as up-to-date, readily accessible records of periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The Administrator may at any time require a report of these data.

Periods of operation during which the parameter boundaries established during the most recent performance test are exceeded are defined as all 3-hour periods of operation during which the average combustion temperature was more than 28 degrees Celsius (50 degrees Fahrenheit) below the average combustion temperature during the most recent performance test at which compliance with § 60.702(a) was determined for process heaters with a design heat input capacity of less than 44 MW (150 million Btu/hr) where the vent stream is introduced with the combustion air or as a secondary fuel. [40 CFR 60.705(c)(3)]

116 [40 CFR 60.705(c)(4)]

Permittee shall keep up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored under 40 CFR 60.703(c) as well as up-to-date, readily accessible records of periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The Administrator may at any time require a report of these data.  
 Periods of operation during which the parameter boundaries established during the most recent performance test are exceeded are defined as whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under § 60.702(a). [40 CFR 60.705(c)(4)]

Permittee shall keep records of the following:

(1) Up-to-date, readily accessible continuous records of the flow indication specified under 40 CFR 60.703(a)(2)(i), § 60.703(b)(2)(i) and § 60.703(c)(1)(i), as well as up-to-date, readily accessible records of all periods and the duration when the vent stream is diverted from the control device.

(2) Where a seal mechanism is used to comply with § 60.703(a)(2)(ii), § 60.703(b)(2)(ii), and § 60.703(c)(1)(ii), a record of continuous flow is not required. In such cases, the owner or operator shall keep up-to-date, readily accessible records of all monthly visual inspections of the seals as well as readily accessible records of all periods and the duration when the seal mechanism is broken, the bypass line valve position has changed, the serial number of the broken car-seal has changed, or when the key for a lock-and-key type configuration has been checked out. [40 CFR 60.705(d)]

Submit reports: Due semiannually. Submit the initial semiannual report to the DEQ within 6 months after the initial start-up date. Include the information outlined in 40 CFR 60.705(l)(1), (l)(2), and (l)(7), as applicable. Subpart RRR. [40 CFR 60.705(l)]  
 Permittee shall maintain on file a schematic diagram of the affected vent streams, collection system(s), fuel systems, control devices, and bypass systems as part of the initial report. This schematic diagram must be retained for the life of the system. [40 CFR 60.705(s)]

118 [40 CFR 60.705(l)]

119 [40 CFR 60.705(s)]

120 [LAC 33:III.1313.C]

121 [LAC 33:III.509]  
 Which Months: All Year Statistical Basis: None specified  
 During the startup and shutdown period, NOx emissions shall be limited to 15.75 lbs/hr and CO emissions to 38.56 lbs/hr. During the SCR maintenance period, NOx emissions shall be limited to 15.75 lbs/hr.

**SPECIFIC REQUIREMENTS**  
**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**

**Activity Number: PER20220001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**EQT\_0002\_B6101 - CO MeOH Fired Heater**

122 [LAC 33:III.509]

Permittee shall monitor and record NOx emissions using Continuous Emissions Monitoring Systems (CEMS) which are calibrated, operated, and maintained according to the manufacturer's specifications and the following requirements:

- a. Comply with 40 CFR Part 60, Appendix B, Performance Specification 2.
- b. Evaluate in accordance with Procedure 1 of 40 CFR 60, Appendix F.
- c. Data availability as specified by Part 70 General Condition V of LAC 33:III.535.A.
- d. NO<sub>2</sub>/NOx in-stack ratio determination in conjunction with Performance Specification 2.

123 [LAC 33:III.509]

Shall comply with the following BACT:  
 -- Use of gaseous fuels in combination with good combustion practices and proper burner design to limit PM10/PM2.5 emissions to no more than 0.0075 lb/MM BTU;

-- Utilize LNB + SCR during normal operation to limit NO<sub>x</sub> <= 0.015 lb/MM BTU (30 day rolling average); startups and shutdowns should be no more than 100 hours/year and limit NO<sub>x</sub> <= 0.15 lb/MM BTU (hourly average); SCR maintenance shall last no more than 36 hours where NO<sub>x</sub> <= 0.15 lb/MM BTU;

-- Utilize oxidation catalyst in combination with good combustion practices and proper equipment design and operation during normal operation to limit CO <= 5 ppmv (hourly average);  
 -- Good combustion practices and proper equipment design and operation to limit CO <= 500 ppmv (hourly average, startups/shutdown <= 100 hours/year);

-- Good combustion practices, proper equipment design and operation, and compliance with 40 CFR 63 Subpart DDDDD to limit VOC <= 0.0027 lb/MM BTU (natural gas) or VOC <= 0.0047 lb/MM BTU (fuel gas) (three 1-hour average); and  
 -- Utilize low carbon intensity gaseous fuels, good combustion and operating practices, and efficiency improvement measures to minimize GHG emissions.

**EQT\_0006\_L6104 - POX Unit Start-up Burner**

124 [40 CFR 63.7500]

125 [LAC 33:III.1313.C]

126 [LAC 33:III.509]

Shall comply with 40 CFR 63 Subpart DDDDD as specified in CRG0001.  
 Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).  
 Which Months: All Year Statistical Basis: None specified

Shall comply with the following BACT:  
 -- Use of gaseous fuels in combination with good combustion practices and proper burner design to limit PM10/PM2.5 emissions to no more than 0.0075 lb/MM BTU;

-- Utilize good combustion practices to limit NO<sub>x</sub> <= 0.098 lb/MM BTU (hourly average), CO <= 0.082 lb/MM BTU (hourly average), and VOC <= 0.0054 lb/MM BTU (annual average);  
 -- Utilize low carbon intensity gaseous fuels, good combustion and operating practices, and efficiency improvement measures to minimize GHG emissions.

**EQT\_0007\_B5701 - Formalin Plant Thermal Oxidizer**

127 [40 CFR 60.44b(l)]

Nitrogen oxides (NO<sub>x</sub>) <= 0.20 lb/MMBTU (86 ng/l) heat input (expressed as NO<sub>2</sub>), except as provided in 40 CFR 60.44b(k). The nitrogen oxide standards apply at all times, including periods of startup, shutdown, or malfunction. Subpart Db. [40 CFR 60.44b(l)]

Which Months: All Year Statistical Basis: Thirty-day rolling average

Determine compliance with the NO<sub>x</sub> standards in 40 CFR 60.44b through performance testing under 40 CFR 60.46b(e), as applicable. Subpart Db. [40 CFR 60.46b(c)]

**SPECIFIC REQUIREMENTS**

**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**EQT 0007 B5701 - Formalin Plant Thermal Oxidizer**

- 129 [40 CFR 60.48b(b)(1)]  
 Nitrogen oxides (NO<sub>x</sub>) monitored by CMS continuously. Calculate nitrogen oxides emission rates as specified in 40 CFR 60.48b(d).  
 Subpart Db. [40 CFR 60.48b(b)(1)]  
 Which Months: All Year Statistical Basis: One-hour average  
 Nitrogen oxides (NO<sub>x</sub>) recordkeeping by CMS continuously. Subpart Db. [40 CFR 60.48b(b)(1)]  
 Oxygen or Carbon dioxide monitored by CMS continuously. Subpart Db. [40 CFR 60.48b(b)(1)]  
 Which Months: All Year Statistical Basis: One-hour average  
 Oxygen or Carbon dioxide recordkeeping by CMS continuously. Subpart Db. [40 CFR 60.48b(b)(1)]  
 Oxygen or Carbon dioxide recordkeeping by CMS continuously. Subpart Db. [40 CFR 60.48b(b)(1)]  
 Which Months: All Year Statistical Basis: One-hour average  
 Oxygen or Carbon dioxide recordkeeping by CMS continuously. Subpart Db. [40 CFR 60.48b(b)(1)]  
 Submit notification: Due as provided by 40 CFR 60.7. Submit a notification of the actual date of initial startup including design heat input capacity of the affected facility, identification of fuels to be combusted, copy of any federally enforceable requirement limiting annual capacity factor, and all other data as specified in 40 CFR 60.49b(a)(1) through (a)(4). Subpart Db. [40 CFR 60.49b(a)]  
 Submit the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility to DEQ.  
 Subpart Db. [40 CFR 60.49b(b)]  
 Submit the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in 40 CFR 60 Appendix B to DEQ. Subpart Db. [40 CFR 60.49b(b)]  
 Fuel rate recordkeeping by electronic or hard copy daily. Record the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. Determine the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. If the facility is not required to continuously monitor any emissions (excluding opacity) or parameters indicative of emissions, the facility may record the amount of each fuel combusted during each calendar month. Subpart Db. [40 CFR 60.49b(d)]  
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records of the information listed in 40 CFR 60.49b(g)(1) through (g)(10) for each steam generating unit operating day. Subpart Db. [40 CFR 60.49b(g)]  
 Submit excess emissions report: Due by the 30th day following the end of each six-month period. Report any excess emissions which occurred during the reporting period. Subpart Db. [40 CFR 60.49b(h)]  
 Submit reports containing the nitrogen dioxide emission rate information recorded under 40 CFR 60.49b(g). Subpart Db. [40 CFR 60.49b(i)]  
 Maintain all records required under 40 CFR 60.49b for a period of 2 years following the date of such record. Subpart Db. [40 CFR 60.49b(o)]  
 The permittee shall obtain and maintain at the affected facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b and the applicable sulfur limit. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period. [40 CFR 60.49b(r)(1)]  
 The reporting period for the reports required under 40 CFR 60.49b Subpart Db is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR 60.49b(w)]  
 Organic HAP > 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). For combustion devices, calculate emission reduction or concentration on a dry basis, corrected to 3-percent oxygen. Subpart G. [40 CFR 63.113(a)(2)]  
 Which Months: All Year Statistical Basis: None specified

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
**Activity Number:** PER2022001  
**Permit Number:** 0180-00233-V0  
**Air - Title V Regular Permit Initial**

**EQT\_0007\_B5701 - Formalin Plant Thermal Oxidizer**

Temperature monitored by temperature monitoring device continuously. Equip the temperature monitoring device with a continuous recorder and install in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. Subpart G. [40 CFR 63.114(a)(1)]

144 [40 CFR 63.114(e)]  
 145 [40 CFR 63.114(e)]

Which Months: All Year Statistical Basis: None specified

Permittee shall establish a range that indicates proper operation of the control or recovery device for each parameter monitored under 40 CFR 63.114(a). In order to establish the range, the information required in § 63.152(b) shall be submitted in the Notification of Compliance Status or the operating permit application or amendment. The range may be based upon a prior performance test conducted for determining compliance with a regulation promulgated by the EPA, and the permittee is not required to conduct a performance test under § 63.116, if the prior performance test was conducted using the same methods specified in § 63.116 and either no process changes have been made since the test, or the permittee can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes. [40 CFR 63.114(e)]

Conduct a performance test using the procedures in 40 CFR 63.116(c)(1) through (c)(4). Subpart G. [40 CFR 63.116(c)]

For each parameter monitored according to 40 CFR 63 Subpart G - Table 3, the permittee shall establish a range for the parameter that indicates proper operation of the control or recovery device. In order to establish the range, the information required in § 63.152(b) shall be submitted in the Notification of Compliance Status or the operating permit application or amendment. [40 CFR 63.117(f)]

146 [40 CFR 63.116(c)]  
 147 [40 CFR 63.117(f)]  
 148 [LAC 33:III.1311.C]

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.

Which Months: All Year Statistical Basis: Six-minute average

Permittee shall ensure compliance with the opacity limits of this permit by visually inspecting the Formalin Plant Thermal Oxidizer (EQT 0007) for visible emissions on a daily basis. If visible emissions are detected, the permittee shall conduct a six-minute opacity reading in accordance with Method 9 of 40 CFR 60, Appendix A. Records of visible emissions checks shall include the emission point ID number, a record if visible emissions were detected, and a record and the results of any Method 9 testing conducted. These records shall be kept on-site and available for inspection by the Office of Environmental Compliance. In lieu of performing daily visual inspections, the permittee may immediately perform a six-minute opacity reading in accordance with Method 9. The permittee shall also perform an opacity reading using Method 9 any time visible emissions from the thermal oxidizer are detected (i.e., during periods other than the scheduled daily visual inspection).

During the SNCR maintenance period, NOx emissions shall be limited to 7.51 lbs/hr.

Permittee shall monitor and record NOx and CO emissions using Continuous Emissions Monitoring Systems (CEMS) which are calibrated, operated, and maintained according to the manufacturer's specifications and the following requirements:

- a. NOx: Comply with 40 CFR Part 60, Appendix B, Performance Specification 2.
- b. CO: Comply with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4A, as applicable.
- c. Evaluate in accordance with Procedure 1 of 40 CFR 60, Appendix F.
- d. Data availability as specified by Part 70 General Condition V of LAC 33:III.535.A.
- e. NO<sub>2</sub>/NOx in-stack ratio determination in conjunction with Performance Specification 2.

150 [LAC 33:III.509]  
 151 [LAC 33:III.509]

**SPECIFIC REQUIREMENTS**

**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**EQT\_0007 B5701 - Formalin Plant Thermal Oxidizer**

152 [LAC 33.III.509]

Shall comply with the following BACT:

- Good practices to minimize the combustion emissions;
- Good process/equipment design to minimize the volume of waste gases to be controlled by the thermal oxidizers through proper process design;
- Use of natural gas as supplemental fuel when needed to ensure good combustion;
- Best operational practices such as continuous combustion chamber temperature monitoring for thermal oxidizer, gas flow measurement, and gas heating value measurement/control;
- Determine minimum temperature required for the proposed destruction efficiency during the initial performance demonstration;
- Utilize LNB + (FGR or SNCR) during normal operation to limit NO<sub>x</sub> <= 0.035 lb/MM BTU; and
- Utilize LNB for no more than 36 hours/year during maintenance period of the SNCR to limit NO<sub>x</sub> <= 0.07 lb/MM BTU.

**EQT\_0008 L7402 - MMA Plant Thermal Oxidizer**

153 [40 CFR 60.44b(l)]

Nitrogen oxides (NO<sub>x</sub>) <= 0.20 lb/MMBTU (86 ng/l) heat input (expressed as NO<sub>2</sub>), except as provided in 40 CFR 60.44b(k). The nitrogen oxide standards apply at all times, including periods of startup, shutdown, or malfunction. Subpart Db. [40 CFR 60.44b(l)]

Which Months: All Year Statistical Basis: Thirty-day rolling average

Determine compliance with the NO<sub>x</sub> standards in 40 CFR 60.44b through performance testing under 40 CFR 60.46b(e) or (f), or under 40 CFR 60.46b(g) or (h), as applicable. Subpart Db. [40 CFR 60.46b(c)]

Nitrogen oxides (NO<sub>x</sub>) monitored by CMS continuously. Calculate nitrogen oxides emission rates as specified in 40 CFR 60.48b(d).

Subpart Db. [40 CFR 60.48b(b)(1)]

Which Months: All Year Statistical Basis: One-hour average

Nitrogen oxides (NO<sub>x</sub>) recordkeeping by CMS continuously. Subpart Db. [40 CFR 60.48b(b)(1)]

Oxygen or Carbon dioxide monitored by CMS continuously. Subpart Db. [40 CFR 60.48b(b)(1)]

Which Months: All Year Statistical Basis: One-hour average

Oxygen or Carbon dioxide recordkeeping by CMS continuously. Subpart Db. [40 CFR 60.48b(b)(1)]

Comply with the provisions of 40 CFR 60.48b(b), (c), (d), (e)(2), (e)(3), and (f). Subpart Db. [40 CFR 60.48b(g)]

Submit notification: Due as provided by 40 CFR 60.7. Submit a notification of the actual date of initial startup including design heat input capacity of the affected facility, identification of fuels to be combusted, copy of any federally enforceable requirement limiting annual capacity factor, and all other data as specified in 40 CFR 60.49b(a)(1) through (a)(4). Subpart Db. [40 CFR 60.49b(a)]

Submit the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility to DEQ.

Subpart Db. [40 CFR 60.49b(b)]

Submit the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in 40 CFR 60 Appendix B to DEQ. Subpart Db. [40 CFR 60.49b(b)]

Fuel rate recordkeeping by electronic or hard copy daily. Record the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. Determine the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. If the facility is not required to continuously monitor any emissions (excluding opacity) or parameters indicative of emissions, the facility may record the amount of each fuel combusted during each calendar month. Subpart Db. [40 CFR 60.49b(d)]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-Y0  
 Air - Title V Regular Permit Initial

**EQT\_0008 L7402 - MMA Plant Thermal Oxidizer**

- 164 [40 CFR 60.49b(g)]
- 165 [40 CFR 60.49b(h)]
- 166 [40 CFR 60.49b(i)]
- 167 [40 CFR 60.49b(o)]
- 168 [40 CFR 60.49b(r)(1)]
- 169 [40 CFR 60.49b(w)]
- 170 [40 CFR 63.113(a)(2)]
- 171 [40 CFR 63.114(a)(1)]
- 172 [40 CFR 63.114(e)]
- 173 [40 CFR 63.116(c)]
- 174 [40 CFR 63.117(f)]
- 175 [40 CFR 63.119(e)(1) and (6)]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records of the information listed in 40 CFR 60.49b(g)(1) through (g)(10) for each steam generating unit operating day, except as provided under 40 CFR 60.49b(p). Subpart Db. [40 CFR 60.49b(g)]  
 Submit excess emissions report: Due by the 30th day following the end of each six-month period. Report any excess emissions which occurred during the reporting period. Subpart Db. [40 CFR 60.49b(h)]  
 Submit reports containing the nitrogen dioxide emission rate information recorded under 40 CFR 60.49b(g). Subpart Db. [40 CFR 60.49b(i)]  
 Maintain all records required under 40 CFR 60.49b for a period of 2 years following the date of such record. Subpart Db. [40 CFR 60.49b(o)]

The permittee shall obtain and maintain at the affected facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b and the applicable sulfur limit. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period. [40 CFR 60.49b(r)(1)]

The reporting period for the reports required under 40 CFR 60 Subpart Db is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR 60.49b(w)]  
 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). For combustion devices, calculate emission reduction or concentration on a dry basis, corrected to 3-percent oxygen. Subpart G. [40 CFR 63.113(a)(2)]

Which Months: All Year Statistical Basis: None specified

Temperature monitored by temperature monitoring device continuously. Equip the temperature monitoring device with a continuous recorder and install in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs. Subpart G. [40 CFR 63.114(a)(1)]  
 Which Months: All Year Statistical Basis: None specified

Permittee shall establish a range that indicates proper operation of the control or recovery device for each parameter monitored under 40 CFR 63.114(a). In order to establish the range, the information required in § 63.152(b) shall be submitted in the Notification of Compliance Status or the operating permit application or amendment. The range may be based upon a prior performance test conducted for determining compliance with a regulation promulgated by the EPA, and the permittee is not required to conduct a performance test under § 63.116, if the prior performance test was conducted using the same methods specified in § 63.116 and either no process changes have been made since the test, or the permittee can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes. [40 CFR 63.114(e)]

Conduct a performance test using the procedures in 40 CFR 63.116(c)(1) through (c)(4). Subpart G. [40 CFR 63.116(c)]  
 For each parameter monitored according to 40 CFR 63 Subpart G - Table 3, the permittee shall establish a range for the parameter that indicates proper operation of the control or recovery device. In order to establish the range, the information required in § 63.152(b) shall be submitted in the Notification of Compliance Status or the operating permit application or amendment. [40 CFR 63.117(f)]

Inlet emissions: Organic HAP > 95 % reduction using a combination of the Tank Farm Vent Scrubber (EQT0009) and either the MMA Plant Thermal Oxidizer (EQT0008) or the Combined Flare (EQT0018). The flare shall meet the specifications described in the general control device requirements of 40 CFR 63.11(b). Subpart G. [40 CFR 63.119(e)(1) and (6)]  
 Which Months: All Year Statistical Basis: None specified

**SPECIFIC REQUIREMENTS**  
**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**EQT 0008 L7402 - MMA Plant Thermal Oxidizer**

- 176 [40 CFR 63.119(e)(3)]  
 Do not exceed 240 hours per year of periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of 40 CFR 63.119(e)(1). Subpart G. [40 CFR 63.119(e)(3)]
- 177 [40 CFR 63.120(d)(1)]  
 Prepare a design evaluation, which includes the information specified in 40 CFR 63.120(d)(1)i), or submit the results of a performance test as described in 40 CFR 63.120(d)(1)ii). Subpart G. [40 CFR 63.120(d)(1)]
- 178 [40 CFR 63.120(d)(4)]  
 Permittee shall demonstrate compliance with the requirements of 40 CFR 63.119(e)(3) (planned routine maintenance of a control device, during which the control device does not meet the specifications of § 63.119(e)(1), shall not exceed 240 hours per year) by including in each Periodic Report required by § 63.152(c) of this subpart the information specified in § 63.122(g)(1). [40 CFR 63.120(d)(4)]
- 179 [40 CFR 63.120(d)(5)]  
 Monitor the parameters specified in the Notification of Compliance Status required in 40 CFR 63.152(b) or in the operating permit and operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status. Subpart G. [40 CFR 63.120(d)(5)]
- 180 [40 CFR 63.120(d)]  
 Submit, as part of the Notification of Compliance Status required by 40 CFR 63.151(b); A monitoring plan containing the information specified in 40 CFR 63.120(d)(2)(i) and either (d)(2)(ii) or (d)(2)(iii); and the information specified in 40 CFR 63.120(d)(3)(i) and, if applicable, (d)(3)(ii). Subpart G. [40 CFR 63.120(d)]
- 181 [40 CFR 63.122(b)]  
 Permittee shall submit, as part of the Monitoring Plan, the information specified in 40 CFR 63.120(d)(2)(i) and the information specified in either § 63.120(d)(2)(ii) or § 63.120(d)(2)(iii). [40 CFR 63.122(b)]
- 182 [40 CFR 63.122(c)]  
 Permittee shall submit, as part of the Notification of Compliance Status required by 40 CFR 63.152(b), the information specified in § 63.122(c)(1). [40 CFR 63.122(c)]
- 183 [40 CFR 63.122(g)]  
 Permittee shall submit, as part of the next Periodic Report required by 40 CFR 63.152(c), the information specified in § 63.122(g)(1) and (g)(2). [40 CFR 63.122(g)]
- 184 [40 CFR 63.123(f)]  
 Permittee shall keep in a readily accessible location the records specified in 40 CFR 63.123(f)(1) and (f)(2). [40 CFR 63.123(f)]
- 185 [40 CFR 63.139(b)]  
 Ensure that the control device is operating whenever organic hazardous air pollutants emissions are vented to the control device. Subpart G. [40 CFR 63.139(b)]
- 186 [40 CFR 63.139(c)(1)]  
 An enclosed combustion device (including but not limited to a vapor incinerator, boiler, or process heater) shall meet the conditions in 40 CFR 63.139(c)(1)(i), (c)(1)(ii), or (c)(1)(iii), alone or in combination with other control devices. [40 CFR 63.139(c)(1)]
- 187 [40 CFR 63.139(c)(4)]  
 Total Organic HAP or Total Organic Compounds (less methane and ethane) >= 95 % reduction by weight by removal or destruction by chemical reaction with the scrubbing liquid; or Outlet concentration: Total Organic HAP or TOC (less methane and ethane) < 20 ppmv, whichever is less stringent. Subpart G. [40 CFR 63.139(c)(4)]
- 188 [40 CFR 63.139(d)]  
 Which Months: All Year Statistical Basis: None specified  
 Except as provided in 40 CFR 63.139(d)(4), Permittee shall demonstrate that each control device or combination of control devices achieves the appropriate conditions specified in § 63.139(c) by using one or more of the methods specified in § 63.139(d)(1) or (d)(2). [40 CFR 63.139(d)]
- 189 [40 CFR 63.143(e)(1)]  
 The permittee shall comply with the monitoring requirements specified in Table 13 of 40 CFR 63 Subpart G. [40 CFR 63.143(e)(1)]
- 190 [40 CFR 63.143(f)]  
 For each parameter monitored in accordance with 40 CFR 63.143(e), permittee shall establish a range that indicates proper operation of the control device. In order to establish the range, the permittee shall comply with the requirements specified in §§ 63.146(b)(7)ii)(A) and (b)(8)(ii). [40 CFR 63.143(f)]
- 191 [40 CFR 63.145]  
 Demonstrate compliance with 40 CFR 63.138 by conducting either a design evaluation or performance test as specified in 40 CFR 63.145 (a) and (i). Subpart G.
- 192 [40 CFR 63.146(b)(7)]  
 As part of the Notification of Compliance Status required by § 63.152(b), Permittee shall submit the information specified in 40 CFR 63.146(b)(7)ii). [40 CFR 63.146(b)(7)]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site

Activity Number: PER2022001

Permit Number: 0180-00233-Y0

Air - Title V Regular Permit Initial

**EQT 0008 L7402 - MMA Plant Thermal Oxidizer**

193 [40 CFR 63.146(e)]

194 [40 CFR 63.147(d)]

195 [LAC 33:III.1101.B]

196 [LAC 33:III.1311.C]

Except as provided in 40 CFR 63.146(f), permittee shall submit as part of the next Periodic Report required by § 63.152(c) of this subpart the information specified in Table 20 of 40 CFR 63 Subpart G. [40 CFR 63.146(e)]

Permittee shall keep records of the daily average value of each continuously monitored parameter for each operating day as specified in 40 CFR 63.152(f). [40 CFR 63.147(d)]

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 CFR Part 60, Appendix A or by using a continuous opacity monitoring system (COMS) meeting the requirements outlined in 40 CFR 60.13(c) and (d).

Which Months: All Year Statistical Basis: None specified

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.

Which Months: All Year Statistical Basis: Six-minute average

Differential Pressure monitored by technically sound method daily to determine whether a breach of the filter has occurred. If readings indicate a breach, conduct an inspection of the filter and initiate any necessary corrective actions as quickly as possible.

Which Months: All Year Statistical Basis: None specified

Differential Pressure recordkeeping by electronic or hard copy daily. Keep records of differential pressure, any breaches of the filters detected, and any corrective actions employed and make these records available for inspection by DEQ personnel.

Permittee shall ensure compliance with the opacity limits of this permit by visually inspecting the MMA Plant Thermal Oxidizer (EQT 0008) for visible emissions on a daily basis. If visible emissions are detected, the permittee shall conduct a six-minute opacity reading in accordance with Method 9 of 40 CFR 60, Appendix A. Records of visible emissions checks shall include the emission point ID number, a record if visible emissions were detected, and a record and the results of any Method 9 testing conducted. These records shall be kept on-site and available for inspection by the Office of Environmental Compliance. In lieu of performing daily visual inspections, the permittee may immediately perform a six-minute opacity reading in accordance with Method 9. The permittee shall also perform an opacity reading using Method 9 any time visible emissions from the thermal oxidizer are detected (i.e., during periods other than the scheduled daily visual inspection).

During the SNCR maintenance period, NOx emissions shall be limited to 35.44 lbs/hr.

Permittee shall monitor and record NOx and CO emissions using Continuous Emissions Monitoring Systems (CEMS) which are calibrated, operated, and maintained according to the manufacturer's specifications and the following requirements:

- a. NOx: Comply with 40 CFR Part 60, Appendix B, Performance Specification 2.
- b. CO: Comply with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4A, as applicable.
- c. Evaluate in accordance with Procedure 1 of 40 CFR 60, Appendix F.
- d. Data availability as specified by Part 70 General Condition V of LAC 33:III.535.A.
- e. NO2/NOx in-stack ratio determination in conjunction with Performance Specification 2.

200 [LAC 33:III.509]

201 [LAC 33:II.509]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**EQT 0008 L7402 - MMA Plant Thermal Oxidizer**

202 [LAC 33.111.509]

Shall comply with the following BACT:

- Good practices to minimize the combustion emissions;
- Good process/equipment design to minimize the volume of waste gases to be controlled by the thermal oxidizers through proper process design;
  - Use of natural gas as supplemental fuel when needed to ensure good combustion;
  - Best operational practices such as continuous combustion chamber temperature monitoring for thermal oxidizer, gas flow measurement, and gas heating value measurement/control;
  - Determine minimum temperature required for the proposed destruction efficiency during the initial performance demonstration;
    - Utilize LNB + (FGR or SNCR) during normal operation to limit NO<sub>x</sub> <= 0.055 lb/MM BTU; and
    - Utilize LNB for no more than 36 hours/year during maintenance period of the SCNR to limit NO<sub>x</sub> <= 0.15 lb/MM BTU.

**EQT 0009 H7401 - Combined Flare**

203 [40 CFR 63.11(b)(1)]

204 [40 CFR 63.11(b)(3)]

205 [40 CFR 63.11(b)(4)]

206 [40 CFR 63.11(b)(5)]

207 [40 CFR 63.11(b)(5)]

208 [40 CFR 63.11(b)(6)(ii)]

209 [40 CFR 63.11(b)(7)(iii)]

210 [40 CFR 63.113(a)(1)(i)]

211 [40 CFR 63.114(a)(2)]

212 [40 CFR 63.116(a)(1)]

213 [40 CFR 63.116(a)(2)]

214 [40 CFR 63.116(a)(3)]

215 [40 CFR 63.118(a)(1)]

Monitor flares to assure that they are operated and maintained in conformance with their designs. Subpart A. [40 CFR 63.11(b)(1)] Operate at all times when emissions may be vented to the flare. Subpart A. [40 CFR 63.11(b)(3)] Design and operate for no visible emissions, as determined using Test Method 22 in Appendix A of 40 CFR 60, except for periods not to exceed a total of 5 minutes during any two consecutive hours. Subpart A. [40 CFR 63.11(b)(4)] Operate with a flame present at all times. Subpart A. [40 CFR 63.11(b)(5)] Presence of a flame monitored by flame monitor continuously. Use a thermocouple or any other equivalent device to detect the presence of a flame. Subpart A. [40 CFR 63.11(b)(5)]

Which Months: All Year Statistical Basis: None specified

Heat content >= 300 BTU/scf (11.2 MJ/scm). Determine the net heating value of the gas being combusted using the equation specified in 40 CFR 63.11(b)(6)(ii). Subpart A. [40 CFR 63.11(b)(6)(ii)] Which Months: All Year Statistical Basis: None specified

Exit Velocity < 400 ft/sec and Vmax, as determined by the method specified in 40 CFR 63.11(b)(7)(i). Determine Vmax using the method specified in 40 CFR 63.11(b)(7)(iii). Subpart A. [40 CFR 63.11(b)(7)(iii)]

Which Months: All Year Statistical Basis: None specified

Comply with the provisions of 40 CFR 63.11(b). Subpart G. [40 CFR 63.113(a)(1)(i)]

Presence of a flame monitored by the regulation's specified method(s) continuously. Subpart G. [40 CFR 63.114(a)(2)]

Which Months: All Year Statistical Basis: None specified

Conduct a visible emission test using the techniques specified in 40 CFR 63.11(b)(4). Subpart G. [40 CFR 63.116(a)(1)] Determine the net heating value of the gas being combusted using the techniques specified in 40 CFR 63.11(b)(6). Subpart G. [40 CFR 63.116(a)(2)]

Determine the exit velocity using the techniques specified in either 40 CFR 63.11(b)(7)(i) or 63.11(b)(8), as appropriate. Subpart G. [40 CFR 63.116(a)(3)]

Permittee shall keep the following records up-to-date and readily accessible: Continuous records of the equipment operating parameters specified to be monitored under 40 CFR 63.114(a) and listed in Table 3 of 40 CFR 63 Subpart G. The hourly records and records of pilot flame outages specified in Table 3 of 40 CFR 63 Subpart G shall be maintained in place of continuous records. [40 CFR 63.118(a)(1)]

**SPECIFIC REQUIREMENTS**  
**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**EQT\_0009 H7401 - Combined Flare**

- 216 [40 CFR 63.118(a)(2)]  
 Permittee shall keep the following records up-to-date and readily accessible: Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in 40 CFR 63.152(f). Records of the times and duration of all periods during which all pilot flames are absent shall be kept rather than daily averages. [40 CFR 63.118(a)(2)]
- According to the schedule in 40 CFR 63.152, permittee shall submit to the Administrator Periodic Reports that include the times and durations of all periods recorded under § 63.118(a)(2) in which all pilot flames of a flare were absent. [40 CFR 63.118(f)(5)]
- Inlet emissions: Organic HAP  $\geq 95\%$  reduction, except as provided in 40 CFR 63.119(e)(2). If a flare is used, it shall meet the specifications described in the general control device requirements of 40 CFR 63.11(b). Subpart G. [40 CFR 63.119(e)(1)]
- Which Months: All Year Statistical Basis: None specified
- Do not exceed 240 hours per year of periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of 40 CFR 63.119(e)(1) or (e)(2). Subpart G. [40 CFR 63.119(e)(3)]
- 220 [40 CFR 63.120(e)(1)]  
 Perform the compliance determination specified in 40 CFR 63.11(b). Subpart G. [40 CFR 63.120(e)(1)]
- 221 [40 CFR 63.120(e)(2)]  
 Submit the information specified in 40 CFR 63.120(e)(2)(i) through (e)(2)(iii) as part of the Notification of Compliance Status required by 40 CFR 63.152(b). Subpart G. [40 CFR 63.120(e)(2)]
- Permittee shall demonstrate compliance with the requirements of 40 CFR 63.119(e)(3) (planned routine maintenance of a flare, during which the flare does not meet the specifications of § 63.119(e)(1), shall not exceed 240 hours per year) by including in each Periodic Report required by § 63.152(c) the information specified in § 63.122(g)(1). [40 CFR 63.120(e)(3)]
- 222 [40 CFR 63.120(e)(3)]  
 Continue to meet the general control device requirements specified in 40 CFR 63.11(b). Subpart G. [40 CFR 63.120(e)(4)]
- Permittee shall submit, as part of the Notification of Compliance Status required by 40 CFR 63.152(b), the information specified in § 63.120(e)(2)(i), (e)(2)(ii), and (e)(2)(iii). [40 CFR 63.122(c)(2)]
- As required by 40 CFR 63.152(c), permittee shall submit Periodic Reports that shall describe each occurrence when the flare does not meet the general control device requirements specified in § 63.11(b) and shall include the identification of the flare which does not meet the general requirements specified in § 63.11(b), and the reason the flare did not meet the general requirements specified in § 63.11(b). [40 CFR 63.122(g)(3)]
- 223 [40 CFR 63.120(e)(4)]  
 Permittee shall keep in a readily accessible location the records of the planned routine maintenance performed on the control device including the duration of each time the control device does not meet the specifications of 40 CFR 63.119 (e)(1) due to the planned routine maintenance. Such a record shall include the information specified in § 63.123(f)(2)(i) and (f)(2)(ii). [40 CFR 63.123(f)(2)]
- 224 [40 CFR 63.122(c)(2)]  
 Design, operate and inspect in accordance with the requirements of 40 CFR 63.139. Subpart G. [40 CFR 63.133(b)(2)]
- 225 [40 CFR 63.122(g)(3)]  
 Ensure that the control device is operating whenever organic hazardous air pollutants emissions are vented to the control device. Subpart G. [40 CFR 63.139(b)]
- 226 [40 CFR 63.123(f)(2)]  
 Comply with the requirements of 40 CFR 63.11(b). Subpart G. [40 CFR 63.139(c)(3)]
- 227 [40 CFR 63.133(b)(2)]  
 Demonstrate that each control device or combination of control devices achieves the appropriate conditions specified in 40 CFR 63.139(c)
- 228 [40 CFR 63.139(b)]  
 by using the methods specified in 40 CFR 63.139(d)(3), except as specified in (d)(4). Subpart G. [40 CFR 63.139(d)]
- 229 [40 CFR 63.139(c)(3)]  
 Comply with the monitoring requirements specified in 40 CFR 63 Subpart G Table 13. Subpart G. [40 CFR 63.143(e)(1)]
- 230 [40 CFR 63.139(d)]  
 Demonstrate compliance with 40 CFR 63.138 by conducting either a design evaluation or performance test as specified in 40 CFR 63.145
- (a) and (i). Subpart G.
- 231 [40 CFR 63.143(e)(1)]  
 Permittee shall submit, as part of the Notification of Compliance Status required by 40 CFR 63.152(b), the information specified in 40 CFR 63.146(b)(7)(i)(A) through (b)(7)(i)(C). [40 CFR 63.146(b)(7)]
- 232 [40 CFR 63.145]  
 Permittee shall submit as part of the next Periodic Report required by § 63.152(c) the information specified in Table 20 of 40 CFR 63.146(e)]
- 233 [40 CFR 63.146(b)(7)]
- 234 [40 CFR 63.146(e)]

**SPECIFIC REQUIREMENTS**

**All ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**EQT\_0009 H7401 - Combined Flare**

- 235 [40 CFR 63.147(d)(1)]  
 Permittee shall keep records of the daily average value of each continuously monitored parameter for each operating day as specified in 40 CFR 63.152(f), except records of the times and duration of all periods during which the pilot flame is absent shall be kept rather than daily averages. [40 CFR 63.147(d)(1)]
- Opacity <= 20 percent, except for a combined total of six hours in any 10 consecutive day period, for burning in connection with pressure valve releases for control over process upsets. Determine opacity by using Method 9 of 40 CFR Part 60, Appendix A or by using a continuous opacity monitoring system (COMS) meeting the requirements outlined in 40 CFR 60.13(c) and (d).
- Which Months: All Year Statistical Basis: None specified  
 Submit notification: Due to SPOC as soon as possible after the start of burning of pressure valve releases for control over process upsets.  
 Notify in accordance with LAC 33:1.3923. Notification is required only if the upset cannot be controlled in six hours.
- 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.
- Which Months: All Year Statistical Basis: Six-minute average  
 Shall conduct proper equipment design, good combustion practices, use of natural gas for pilot gas/assist gas, and comply with 40 CFR 63.670 and 63.671 as specified in 40 CFR 63.108(a) as BACT.

**EQT\_0010 L7201 - Cooling Tower**

- 236 [LAC 33:III.1105]  
 Heat exchange systems (cooling water): HAP monitored by the regulation's specified method(s) monthly for the first 6 months and quarterly thereafter to detect leaks. Monitor for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more specified HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system. Subpart F. [40 CFR 63.104(b)]
- Which Months: All Year Statistical Basis: None specified  
 Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]
- 237 [LAC 33:III.1105]  
 Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain the records identified in 40 CFR 63.104(f)(1)(i) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]
- 238 [LAC 33:III.1311.C]  
 Shall comply with the following BACT:  
 -- PM10/PM2.5: Equip with high efficiency mist/drift eliminators with a drift rate of <= 0.0005% and limit TDS to no more than 1505 ppmw (annual average); and  
 -- VOC: Comply with applicable provisions in 40 CFR 63 Subpart F.

**EQT\_0011 L7530 - Wastewater Treatment Plant**

- 239 [LAC 33:III.509]  
 Equipment/operational data recordkeeping by electronic or hard copy monthly. Keep records of the information specified in LAC 33:III. 2109.D.2.

**EQT\_0012 L7901 - Diesel Emergency Generator**

- 240 [40 CFR 60.4205(b)]  
 Comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power. Subpart III. [40 CFR 60.4205(b)]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**EQT\_0012 L7901 - Diesel Emergency Generator**

- 246 [40 CFR 60.4206] Operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 40 CFR 60.4205 over the entire life of the engine. Subpart III.
- 247 [40 CFR 60.4207(b)] Use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Subpart III. [40 CFR 60.4207(b)]
- 248 [40 CFR 60.4209(a)] Operating time monitored by hour/time monitor continuously during operation. If the emergency engine meets the standards applicable to emergency engines, install a non-resettable hour meter prior to startup of the engine. Subpart III. [40 CFR 60.4209(a)]
- Which Months: All Year Statistical Basis: None specified
- 249 [40 CFR 60.4211(a)(1)] Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions, except as permitted in 40 CFR 60.4211(g). Subpart III. [40 CFR 60.4211(a)(1)]
- 250 [40 CFR 60.4211(a)(2)] Change only those emission-related settings that are permitted by the manufacturer, except as permitted in 40 CFR 60.4211(g). Subpart III. [40 CFR 60.4211(a)(2)]
- 251 [40 CFR 60.4211(a)(3)] Meet the requirements of 40 CFR 1068, as applicable, except as permitted in 40 CFR 60.4211(g). Subpart III. [40 CFR 60.4211(a)(3)]
- 252 [40 CFR 60.4211(c)] Ensure engine is certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. Install and configure according to the manufacturer's emissions-related specifications, except as permitted in 40 CFR 60.4211(g). Subpart III. [40 CFR 60.4211(c)]
- 253 [40 CFR 60.4211(f)(1)] There is no time limit on the use of emergency stationary ICE in emergency situations. Subpart III. [40 CFR 60.4211(f)(1)]
- 254 [40 CFR 60.4211(f)(2)(i)] Operate for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by the federal, state or local government; the manufacturer; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. LDEQ may be petitioned for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if records are maintained indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- Subpart III. [40 CFR 60.4211(f)(2)(i)]
- 255 [40 CFR 60.4211(f)(3)] Operate for up to 50 hours per calendar year in non-emergency situations. Count the 50 hours of operation in non-emergency situations as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2)(i). Do not use the 50 hours per calendar year for non-emergency situations for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except as provided in 40 CFR 60.4211(f)(3)
- (i). Subpart III. [40 CFR 60.4211(f)(3)]
- 256 [40 CFR 60.4211(f)] Operate according to the requirements in 40 CFR 60.4211(f)(1), (f)(2)(i), and (f)(3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart III, any operation other than as described in 40 CFR 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 CFR 60 Subpart III and must meet all requirements for non-emergency engines. Subpart III. [40 CFR 60.4211(f)]
- 257 [40 CFR 60.4211(g)] Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year after the engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions (can include within 1 year of startup), or within 1 year after the emission-related settings are changed in a way that is not permitted by the manufacturer. Conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance, if the engine is greater than 500 HP. Subpart III. [40 CFR 60.4211(g)]
- 258 [40 CFR 60.4211(g)] Keep a maintenance plan and records of conducted maintenance. Subpart III. [40 CFR 60.4211(g)]
- 259 [40 CFR 60.4211(g)] Maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Subpart III. [40 CFR 60.4211(g)]

**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**SPECIFIC REQUIREMENTS**

**EQT 0012 L7901 - Diesel Emergency Generator**

260 [40 CFR 60.4214(b)] 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. Subpart III. [40 CFR 60.4214(b)]

261 [40 CFR 60.4214(d)] Submit report : Due annually, by the 31st of March. Submit report electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central DataExchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). Submit the written report to EPA at the appropriate address listed in 40 CFR 60.4, if the reporting form specific to 40 CFR 60 Subpart III is not available in CEDRI at the time that the report is due. Include the information specified in 40 CFR 60.4214(d)(1)(i) through (d)(1)(vii). Subpart III. [40 CFR 60.4214(d)]

262 [40 CFR 63.6590(b)(1)(i)] Submit initial notification as specified in 40 CFR 63.6645(f). [40 CFR 63.6590(b)(1)(i)]  
 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 CFR Part 60, Appendix A or by using a continuous opacity monitoring system (COMS) meeting the requirements outlined in 40 CFR 60.13(c) and (d).

263 [LAC 33.III.1101.B] Which Months: All Year Statistical Basis: None specified  
 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.

264 [LAC 33.III.1311.C] Which Months: All Year Statistical Basis: Six-minute average  
 Shall comply with the following BACT:  
 -- Proper equipment design and good combustion practices;  
 -- Use ultra-low sulfur diesel (ULSD) as fuel;  
 -- NOx and CO: Low emission combustion;  
 -- Compliance with 40 CFR 60 Subpart III - [PM10 <= 0.15 g/hp-hr, (NOx + NMHC) <= 4.8 g/hp-hr, CO <= 2.6 g/hp-hr], and  
 -- GHG <= 1.16 lb/hp-hr.

**EQT 0016 F7802 - HTF Storage Tank**

266 [LAC 33.III.509] The tank shall be equipped with a fixed roof (FR) as BACT for VOC emissions.

**EQT 0017 F7230 - Urea Solution Storage Tank**

267 [LAC 33.III.509] The tank shall be equipped with a fixed roof (FR) as BACT for VOC emissions.

**EQT 0018 TF-SCBR - Tank Farm Vent Scrubber**

268 [40 CFR 63.119(e)(1) and (6)] Inlet emissions: Organic HAP >= 95 % reduction using a combination of the Tank Farm Vent Scrubber (EQT0018) and either the MMA Plant Thermal Oxidizer (EQT0008) or the Combined Flare (EQT0009). The flare shall meet the specifications described in the general control device requirements of 40 CFR 63.119(e)(1) and (6)  
 Which Months: All Year Statistical Basis: None specified  
 Do not exceed 240 hours per year of planned routine maintenance of the control device, during which the control device does not meet the specifications of 40 CFR 63.119(e)(1). Subpart G. [40 CFR 63.119(e)(3)]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
**Activity Number:** PER2022001  
**Permit Number:** 0180-00233-V0  
**Air - Title V Regular Permit Initial**

**EQT\_0018 TF-SCBR - Tank Farm Vent Scrubber**

- 270 [40 CFR 63.120(d)(4)]  
 Permittee shall demonstrate compliance with the requirements of 40 CFR 63.119(e)(3) (planned routine maintenance of a control device, during which the control device does not meet the specifications of § 63.119 (e)(1), shall not exceed 240 hours per year) by including in each Periodic Report required by § 63.152(c) of this subpart the information specified in § 63.122(g)(1). [40 CFR 63.120(d)(4)]
- 271 [40 CFR 63.120(d)(5)]  
 Monitor the parameters specified in the Notification of Compliance Status required in 40 CFR 63.152(b) or in the operating permit and operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status. Subpart G. [40 CFR 63.120(d)(5)]
- 272 [40 CFR 63.120(d)(5)]  
 Submit, as part of the Notification of Compliance Status required by 40 CFR 63.151(b): A monitoring plan containing the information specified in 40 CFR 63.120(d)(2)(i) and in either (d)(2)(ii) or (d)(2)(iii); and the information specified in 40 CFR 63.120(d)(3)(i) and, if applicable, (d)(3)(ii). Subpart G. [40 CFR 63.120(d)(5)]
- 273 [40 CFR 63.120(d)(5)]  
 Permittee shall submit, as part of the Monitoring Plan, the information specified in 40 CFR 63.120(d)(2)(i) and the information specified in either § 63.120(d)(2)(ii) or § 63.120(d)(2)(iii). [40 CFR 63.122(b)]
- 274 [40 CFR 63.122(c)]  
 Permittee shall submit, as part of the Notification of Compliance Status required by 40 CFR 63.152(b), the information specified in § 63.122(c)(1). [40 CFR 63.122(c)]
- 275 [40 CFR 63.122(g)]  
 Permittee shall submit, as part of the next Periodic Report required by 40 CFR 63.152(c), the information specified in § 63.122(g)(1) and (g)(2). [40 CFR 63.122(g)]
- 276 [40 CFR 63.123(f)]  
 Permittee shall keep in a readily accessible location the records specified in 40 CFR 63.123(f)(1) and (f)(2). [40 CFR 63.123(f)]
- 277 [40 CFR 63.139(b)]  
 Ensure that the control device is operating whenever organic hazardous air pollutants emissions are vented to the control device. Subpart G. [40 CFR 63.139(b)]
- 278 [40 CFR 63.139(c)(1)]  
 An enclosed combustion device (including but not limited to a vapor incinerator, boiler, or process heater) shall meet the conditions in 40 CFR 63.139(c)(1)(i), (c)(1)(ii), or (c)(1)(iii), alone or in combination with other control devices. [40 CFR 63.139(c)(1)]
- 279 [40 CFR 63.139(c)(4)]  
 Total Organic HAP or Total Organic Compounds (less methane and ethane)  $\geq 95\%$  reduction by weight by removal or destruction by chemical reaction with the scrubbing liquid, or Outlet concentration: Total Organic HAP or TOC (less methane and ethane)  $< 20$  ppmv, whichever is less stringent, using a combination of the Tank Farm Vent Scrubber and either the MMA Plant Thermal Oxidizer (EQT0008) or the Combined Flare (EQT0009). Subpart G. [40 CFR 63.139(c)(4)]
- 280 [40 CFR 63.139(d)]  
 Which Months: All Year Statistical Basis: None specified  
 Except as provided in 40 CFR 63.139(d)(4), Permittee shall demonstrate that each control device or combination of control devices achieves the appropriate conditions specified in § 63.139(c) by using one or more of the methods specified in § 63.139(d)(1) or (d)(2). [40 CFR 63.139(d)]
- 281 [40 CFR 63.143(e)(1)]  
 The permittee shall comply with the monitoring requirements specified in Table 13 of 40 CFR 63 Subpart G. [40 CFR 63.143(e)(1)]
- 282 [40 CFR 63.143(f)]  
 For each parameter monitored in accordance with 40 CFR 63.143(e), permittee shall establish a range that indicates proper operation of the control device. In order to establish the range, the permittee shall comply with the requirements specified in §§ 63.146(h)(7)(ii)(A) and (b)(8)(ii). [40 CFR 63.143(f)]
- 283 [40 CFR 63.145]  
 Demonstrate compliance with 40 CFR 63.138 by conducting either a design evaluation or performance test as specified in 40 CFR 63.145 (a) and (i). Subpart G.
- 284 [40 CFR 63.146(b)(7)]  
 As part of the Notification of Compliance Status required by § 63.152(b), Permittee shall submit the information specified in 40 CFR 63.146(b)(7)(ii). [40 CFR 63.146(b)(7)]
- 285 [40 CFR 63.146(e)]  
 Except as provided in 40 CFR 63.146(f), permittee shall submit as part of the next Periodic Report required by § 63.152(c) of this subpart the information specified in Table 20 of 40 CFR 63 Subpart G. [40 CFR 63.146(e)]
- 286 [40 CFR 63.147(d)]  
 Permittee shall keep records of the daily average value of each continuously monitored parameter for each operating day as specified in 40 CFR 63.152(f). [40 CFR 63.147(d)]

**SPECIFIC REQUIREMENTS****All ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**

Activity Number: PER2022001

Permit Number: 0180-00233-V0

Air - Title V Regular Permit Initial

**EQT 0021 F7603 - Aqueous Phase Tank**

287 [40 CFR 63.133(a)(1)]

288 [40 CFR 63.146(b)(2)]

289 [40 CFR 63.146(b)(5)]

290 [LAC 33:III.509]  
Vents shall be routed through a closed vent system (vapor collection system) to a thermal oxidizer / scrubber as BACT for VOC emissions.**EQT 0026 F7611 - Heavy Ester Tank**

291 [40 CFR 63.123(a)]

Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

292 [LAC 33:III.509]

**EQT 0033 F7619 - Pure Methanol Column Sidedraw Tank**

293 [40 CFR 60.112b(a)(3)(i)]

294 [40 CFR 60.112b(a)(3)(ii)]

295 [40 CFR 60.116b(b)]

296 [40 CFR 60.116b(c)]

297 [40 CFR 63.133(a)(2)(i)]

298 [40 CFR 63.133(b)(1)(i)]

299 [40 CFR 63.133(b)(1)(ii)]

300 [40 CFR 63.133(f)]

The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR 60.485(b). [40 CFR 60.112b(a)(3)(i)]

The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.112b(a)(3)(ii)]

Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Keep copies of all records for the life of the source as specified by 40 CFR 60.116b(a). Subpart Kb. [40 CFR 60.116b(b)]

VOL storage data recordkeeping by electronic or hard copy at the approved frequency. Records consist of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. Keep copies of all records for at least two years. Subpart Kb. [40 CFR 60.116b(c)]

Operate and maintain a fixed roof and a closed-vent system that routes the organic hazardous air pollutants vapors vented from the wastewater tank to a control device. Subpart G. [40 CFR 63.133(a)(2)(i)]

Fixed roof: Maintain in accordance with the requirements specified in 40 CFR 63.148, except as provided in 40 CFR 63.133(b)(4). Subpart G. [40 CFR 63.133(b)(1)(i)]

Fixed roof: Maintain each opening in a closed position at all times that the wastewater tank contains a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream except when it is necessary to use the opening for wastewater sampling, removal, or for equipment inspection, maintenance, or repair. Subpart G. [40 CFR 63.133(b)(1)(ii)]

Equipment/operational data monitored by technically sound method once initially and once every six months. Monitor for improper work practices in accordance with 40 CFR 63.143, except as specified in 40 CFR 63.133(e). Subpart G. [40 CFR 63.133(f)]

Which Months: All Year Statistical Basis: None specified

Equipment/operational data monitored by technically sound method at the regulation's specified frequency. Inspect each wastewater tank for control equipment failures as defined in 40 CFR 63.133(g)(1)(i) through (g)(1)(ix) according to the schedule in 40 CFR 63.133(g)(2) and (g)(3). Subpart G. [40 CFR 63.133(g)]

Which Months: All Year Statistical Basis: None specified

301 [40 CFR 63.133(g)]

**SPECIFIC REQUIREMENTS**

AI ID: 2344532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**EQT 0033 F7619 - Pure Methanol Column Sidedraw Tank**

- 302 [40 CFR 63.133(h)] When an improper work practice or a control equipment failure is identified, make first efforts at repair no later than 5 calendar days after identification. Complete repair within 45 calendar days after identification. Subpart G. [40 CFR 63.133(h)]
- 303 [40 CFR 63.143(a)] Comply with the inspection requirements in 40 CFR 63. Subpart G Table 11. Subpart G. [40 CFR 63.143(a)]
- 304 [40 CFR 63.147] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records specified in 40 CFR 63.147(b), as applicable. Subpart G.
- 305 [LAC 33:III.509] Vents shall be routed through a closed vent system (vapor collection system) to a thermal oxidizer / scrubber as BACT for VOC emissions.

**EQT 0036 COMeOH1 - CO MeOH Plant Startup Vent 1**

- 306 [LAC 33:III.2115.C] Nonhalogenated hydrocarbon burning: Temperature  $\geq 1600$  F (870 degrees C) for 0.5 seconds or greater in a direct-flame afterburner or thermal incinerator. Other devices will be accepted provided 98 percent or greater VOC destruction or removal efficiency can be demonstrated, as determined in accordance with LAC 33:III.2115.K.1, or if emissions are reduced to 20 ppm by volume, whichever is less stringent.

Which Months: All Year Statistical Basis: None specified

Install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with design specifications. Monitor and record at a minimum the parameters listed in LAC 33:III.2115.K.2.a through K.2.e.

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain the records specified in LAC 33:III.2115.L.1 through L.3. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request.

Vents shall be routed through a closed vent system (vapor collection system) to a flare as BACT for VOC emissions.

**EQT 0052 VCS/CVS - Vapor Collection System / Closed Vent System**

- 307 [LAC 33:III.2115.K.2] Bypass lines Option 1: Flow monitored by flow indicator once every 15 minutes. Equip the flow indicator with a recorder that takes a reading at least once every 15 minutes and install at the entrance to any bypass line that could divert the gas stream to the atmosphere. Subpart G. [40 CFR 63.114(d)(1)]

Which Months: All Year Statistical Basis: None specified

Bypass lines Option 2: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]

Which Months: All Year Statistical Basis: None specified

Bypass lines Option 2: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.114(d)(2)]

Permittee shall keep the following records up-to-date and readily accessible:  
 Option 1 [40 CFR 63.118(a)(2)] Hourly records of whether the flow indicator specified under § 63.114(d)(1) was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the gas stream is diverted to the atmosphere or the monitor is not operating; or

Option 2 [40 CFR 63.118(a)(4)]; Where a seal mechanism is used to comply with § 63.114(d)(2), hourly records of flow are not required. In such cases, the permittee shall record that the monthly visual inspection of the seals or closure mechanism has been done, and shall record the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-

key type lock has been checked out, and records of any car-seal that has broken. [40 CFR 63.118(a)]

- 310 [40 CFR 63.114(d)(1)]

- 311 [40 CFR 63.114(d)(2)]

- 312 [40 CFR 63.114(d)(2)]

- 313 [40 CFR 63.118(a)]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**EQT\_0052\_VCS/CVS - Vapor Collection System / Closed Vent System**

- 314 [40 CFR 63.118(f)]  
 63.152: Permittee shall submit to the Administrator Periodic Reports of the following recorded information according to the schedule in 40 CFR 63.152:
- Option 1 [40 CFR 63.118(f)(3)]: Reports of the times and durations of all periods recorded under § 63.118(a)(3) when the gas stream is diverted to the atmosphere through a bypass line; or
  - Option 2 [40 CFR 63.118(f)(4)]: Reports of all periods recorded under § 63.118(a)(4) in which the seal mechanism is broken, the bypass line valve position has changed, or the key to unlock the bypass line valve was checked out. [40 CFR 63.118(f)]
- Closed-vent system: Design, operate and inspect in accordance with the requirements of 40 CFR 63.148, except as provided in 40 CFR 63.133(b)(4). Subpart G. [40 CFR 63.133(b)(3)]
- Make a first attempt at repair as soon as practicable but no later than 5 calendar days after identification of gaps, cracks, tears, or holes in ductwork, piping, or connections to covers and control devices during an inspection. Complete repairs no later than 15 calendar days after identification or discovery of the defect. Subpart G. [40 CFR 63.139(f)]
- Vapor collection system or closed vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(1)(i)]
- Which Months: All Year Statistical Basis: None specified
- Vapor collection system or closed vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. Subpart G. [40 CFR 63.148(b)(1)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Vapor collection system or closed vent system (ductwork): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(2)(i)]
- Which Months: All Year Statistical Basis: None specified
- Vapor collection system or closed vent system (ductwork): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.148(c). Subpart G. [40 CFR 63.148(b)(2)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Vapor collection system or closed vent system (ductwork): Presence of a leak monitored by visual, audible, and/or olfactory annually. Subpart G. [40 CFR 63.148(b)(2)(iii)]
- Which Months: All Year Statistical Basis: None specified
- EQT0008 and EQT0009: Fixed roof, cover, or enclosure: Presence of a leak monitored by visual, audible, and/or olfactory once initially and once every six months as specified in 40 CFR 63.133 through 63.137. Subpart G. [40 CFR 63.148(b)(3)]
- Which Months: All Year Statistical Basis: None specified
- Repair leaks (as indicated by an instrument reading greater than 500 ppm above background or by visual inspections) as soon as practicable, except as provided in 40 CFR 63.148(e). Make a first attempt at repair no later than 5 calendar days after the leak is detected. Complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.148(d)(3). Subpart G. [40 CFR 63.148(d)]
- Vapor collection system or closed vent system (bypass lines): Flow monitored by flow indicator once every 15 minutes. Install the flow indicator at the entrance to any bypass line. Subpart G. [40 CFR 63.148(f)(1)]
- Which Months: All Year Statistical Basis: None specified
- Vapor collection system or closed vent system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the closed position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.148(f)(2)]
- Which Months: All Year Statistical Basis: None specified

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**EQT\_0052 VCS/CVS - Vapor Collection System / Closed Vent System**

326 [40 CFR 63.148(f)(2)] Vapor collection system or closed vent system (bypass lines): Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.148(f)(2)]

327 [40 CFR 63.148(i)] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in 40 CFR 63.148(i)(1) through (i)(6). Subpart G. [40 CFR 63.148(i)]  
 Submit the information specified in 40 CFR 63.148(j)(1) through (j)(3) with the reports required by 40 CFR 63.182(b) of subpart H or 40 CFR 63.152(c). Subpart G. [40 CFR 63.148(j)]

**FUG\_0001 MCA-FUG - Equipment Leaks**

329 [40 CFR 63.162(c)] Identify each piece of equipment in a process unit such that it can be distinguished readily from equipment that is not subject to 40 CFR 63.162(c). Subpart H. Subpart H. [40 CFR 63.162(c)]

330 [40 CFR 63.162(f)] Clearly identify leaking equipment, for leaking equipment detected as specified in 40 CFR 63.163, 40 CFR 63.164, 40 CFR 63.168, 40 CFR 63.169, and 40 CFR 63.172 through 63.174. The identification may be removed after the equipment is repaired, except for valves or for connectors subject to 40 CFR 63.174(c)(1)(i). The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(i)(D), and no leak has been detected during the follow-up monitoring. If electing to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring. Subpart H. [40 CFR 63.162(f)]

Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as provided in 40 CFR 63.162(b) and 63.163(e) through (i). If a reading of 5,000 ppm (phase II), or 5,000 ppm (phase III, pumps handling polymerizing monomers), 2,000 ppm (phase III, pumps in food/medical service), or 1,000 ppm (phase III, all other pumps) or greater is detected, initiate the repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)]

(1) Which Months: All Year Statistical Basis: None specified

Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. If a leak is detected, initiate the repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(3)]

Which Months: All Year Statistical Basis: None specified

Pumps in light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.163(c)(3) and 40 CFR 63.171. Subpart H. [40 CFR 63.163(c)]

Pumps in light liquid service: Implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.176, if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart H. [40 CFR 63.163(d)(2)]

Pumps in light liquid service: Determine percent leaking pumps using the equation in 40 CFR 63.163(d)(4). Subpart H. [40 CFR 63.163(d)(4)]

Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(1)]

**SPECIFIC REQUIREMENTS**

**AID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER2022001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**FUG 0001 MCA-FUG - Equipment Leaks**

- 337 [40 CFR 63.163(e)(2)]  
Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(2)]
- 338 [40 CFR 63.163(e)(3)]  
Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(3)]
- 339 [40 CFR 63.163(e)(4)]  
Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, monitor the pump as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid. If an instrument reading of 1,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(4)]
- Which Months: All Year Statistical Basis: None specified
- 340 [40 CFR 63.163(e)(6)(i)]  
Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)(i)]
- 341 [40 CFR 63.163(e)(6)(ii)]  
Pumps in light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)(ii)]
- 342 [40 CFR 63.163(e)]  
Pumps in light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.163(e)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)]
- Which Months: All Year Statistical Basis: None specified
- 343 [40 CFR 63.163(j)(1)]  
Pumps in light liquid service (unsafe-to-monitor): Determine that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.163(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(1)]
- 344 [40 CFR 63.163(j)(2)]  
Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- 345 [40 CFR 63.164(a)]  
Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.162(b) and 40 CFR 63.164(h) and (i). Subpart H. [40 CFR 63.164(a)]
- 346 [40 CFR 63.164(b)]  
Compressors: Operate the seal system with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart H. [40 CFR 63.164(b)]
- 347 [40 CFR 63.164(c)]  
Compressors: Ensure that the barrier fluid is not in light liquid service. Subpart H. [40 CFR 63.164(c)]

**SPECIFIC REQUIREMENTS**  
 AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
**Air - Title V Regular Permit Initial**

### FUG\_0001 MCA-FUG - Equipment Leaks

- 348 [40 CFR 63.164(d)]  
 Compressors: Equip each barrier fluid system as described in 40 CFR 63.164(a) through (c) with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart H. [40 CFR 63.164(d)]
- 349 [40 CFR 63.164(e)(2)]  
 Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. Subpart H. [40 CFR 63.164(e)(2)]
- 350 [40 CFR 63.164(g)]  
 Compressors: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.164(g)]
- 351 [40 CFR 63.164(i)(2)]  
 Compressors (no detectable emissions): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially and annually, and at other times requested by DEQ. Comply with this requirement instead of the requirements in 40 CFR 63.164(a) through (h). Subpart H. [40 CFR 63.164(i)(2)]
- Which Months: All Year Statistical Basis: None specified
- Compressors (sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an alarm, unless the compressor is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under 40 CFR 63.164(e)(2), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.164(g). Subpart H.
- Which Months: All Year Statistical Basis: None specified
- Pressure relief device in gas/vapor service: Organic HAP < 500 ppm above background except during pressure releases, as determined by the method specified in 63.180(c). Subpart H. [40 CFR 63.165(a)]
- Which Months: All Year Statistical Basis: None specified
- Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.165(b)(1)]
- Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after the pressure release and being returned to organic HAP service, to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 63.180(c). Subpart H. [40 CFR 63.165(b)(2)]
- Which Months: All Year Statistical Basis: None specified
- Pressure relief devices in gas/vapor service (rupture disk): After each pressure release, install a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.165(a) and (b). Subpart H. [40 CFR 63.165(d)(2)]
- Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b).
- Operate the system as specified in 40 CFR 63.166(b). Subpart H.
- Open-ended valves or lines: Equip with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and (e). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart H.
- Valves in gas/vapor service or light liquid service (Phase II): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- Which Months: All Year Statistical Basis: None specified

**SPECIFIC REQUIREMENTS**  
**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**

Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

#### **FUG 0001 MCA-FUG - Equipment Leaks**

360 [40 CFR 63.168(d)(1)]

Valves in gas/vapor service or light liquid service (Phase III, 2 percent or greater leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly, as specified in 40 CFR 63.180(b); or implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175 and monitor quarterly. If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). If electing to implement a quality improvement program, follow the procedures in 40 CFR 63.175. Subpart H. [40 CFR 63.168(d)(1)]

Which Months: All Year Statistical Basis: None specified

361 [40 CFR 63.168(d)(2)]  
 Valves in gas/vapor service or light liquid service (Phase III, less than 2 percent leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Permittee may elect to comply with the alternate standards in 40 CFR 63.168(d)(3) and (d)(4). Subpart H. [40 CFR 63.168(d)(2)]

Which Months: All Year Statistical Basis: None specified

362 [40 CFR 63.168(e)(1)]  
 Valves in gas/vapor service or light liquid service: Determine percent leaking valves using the equation in 40 CFR 63.168(e)(1). Subpart H. [40 CFR 63.168(e)(1)]

363 [40 CFR 63.168(f)(3)]  
 Valves in gas/vapor service or light liquid service (after leak repair): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within three months (at least) after repair to determine whether the valve has resumed leaking. Subpart H. [40 CFR 63.168(f)(3)]

Which Months: All Year Statistical Basis: None specified

364 [40 CFR 63.168(f)]  
 Valves in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.168(f)]

365 [40 CFR 63.168(h)(1)]  
 Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.168(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(1)]

366 [40 CFR 63.168(h)(2)]  
 Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the valves as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(2)]

Which Months: All Year Statistical Basis: None specified

367 [40 CFR 63.168(i)(1)]  
 Valves in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(1)]

368 [40 CFR 63.168(i)(3)]  
 Valves in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the valves at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(3)]

Which Months: All Year Statistical Basis: None specified

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER2022001  
 Permit Number: 0180-00233-V0  
**Air - Title V Regular Permit Initial**

**FUG\_0001 MCA-FUG - Equipment Leaks**

369 [40 CFR 63.169(a)]

Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service:  
 Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) if evidence of a potential leak to the atmosphere is found by visible, audible, olfactory, or any other detection method. If a reading of 10,000 ppm for agitators, 5,000 ppm for pumps handling polymerizing monomers, 2,000 ppm for all other pumps (including pumps in food/medical service), or 500 ppm for valves, connectors, instrumentation systems, and pressure relief devices, or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.169(c). Subpart H. [40 CFR 63.169(a)]

Which Months: All Year Statistical Basis: None specified

Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service:  
 Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.169(c)]

Surge control vessels and bottoms receivers: Equip with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements of 40 CFR 63.172, except as provided in 40 CFR 63.162(b), or comply with the requirements of 40 CFR 63.119(b) or (c), if surge control vessel or bottoms receiver is not routed back to the process and meets the conditions specified in 40 CFR 63 Subpart H Table 2 or Table 3. Subpart H.

Closed-vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(i)]

Which Months: All Year Statistical Basis: None specified

Closed-vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(ii)]

Which Months: All Year Statistical Basis: None specified

Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(i)]

Which Months: All Year Statistical Basis: None specified

Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(ii)]

Which Months: All Year Statistical Basis: None specified

Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.172(j). Subpart H. [40 CFR 63.172(h)]

Closed-vent system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart H. [40 CFR 63.172(j)(2)]

Which Months: All Year Statistical Basis: None specified

Closed-vent system (bypass lines): Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart H. [40 CFR 63.172(j)(2)]

Closed-vent system (unsafe-to-inspect): Demonstrate that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential dangers as a consequence of complying with 40 CFR 63.172(f)(1) or (f)(2). Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(1)]

378 [40 CFR 63.172(j)(2)]

379 [40 CFR 63.172(k)(1)]

**SPECIFIC REQUIREMENTS**

**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER20220001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**FUG 0001 MCA-FUG - Equipment Leaks**

380 [40 CFR 63.172(k)(2)]

Closed-vent system (unsafe-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(2)]

Which Months: All Year Statistical Basis: None specified

Closed-vent system (difficult-to-inspect): Demonstrate that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2).

Subpart H. [40 CFR 63.172(l)(1)]

Closed-vent system (difficult-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every five years.

Maintain a written plan that requires inspection of the equipment at least once every five years. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(2)]

Which Months: All Year Statistical Basis: None specified

Ensure that the closed-vent system or control device is operating whenever organic HAP emissions are vented to the closed-vent system or control device. Subpart H. [40 CFR 63.172(m)]

Agitators in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(a)]

Which Months: All Year Statistical Basis: None specified

Agitators in gas/vapor service or light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(b)]

Which Months: All Year Statistical Basis: None specified

Agitators in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.173(c)]

Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(1)]

Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid organic HAP service. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(2)]

Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173 (a). Subpart H. [40 CFR 63.173(d)(3)]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER20220001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**FUG\_0001 MCA-FUG - Equipment Leaks**

- 390 [40 CFR 63.173(d)(4)] Agitators in gas/vapor service or light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the agitator seal. If there are indications of liquid dripping from the agitator seal at the time of the weekly inspection, monitor the agitator as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(4)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)(i)]
- Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)]
- Agitators in gas/vapor service or light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.173(d)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at any time in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(1)]
- Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the agitator at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(3)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.173(a) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(1)]
- Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the agitator as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within 12 months after the compliance date, except as provided in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(1)]
- Which Months: All Year Statistical Basis: None specified
- 391 [40 CFR 63.173(d)(6)(ii)]
- 392 [40 CFR 63.173(d)(6)]
- 393 [40 CFR 63.173(d)]
- 394 [40 CFR 63.173(h)(1)]
- 395 [40 CFR 63.173(h)(3)]
- 396 [40 CFR 63.173(j)(1)]
- 397 [40 CFR 63.173(j)(2)]
- 398 [40 CFR 63.174(b)(1)]

**SPECIFIC REQUIREMENTS**

**AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site**  
**Activity Number: PER20220001**  
**Permit Number: 0180-00233-V0**  
**Air - Title V Regular Permit Initial**

**FUG\_0001 MCA-FUG - Equipment Leaks**

399 [40 CFR 63.174(b)(2)]

Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within the first 12 months after initial startup or by no later than 12 months after the date of promulgation of a specific subpart that references 40 CFR 63. Subpart H, whichever is later, except as specified in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, as a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(2)]

Which Months: All Year Statistical Basis: None specified

400 [40 CFR 63.174(b)(3)(i)]

Connectors in gas/vapor service or light liquid service (0.5% or greater leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Subpart H. [40 CFR 63.174(b)(3)(i)]

Which Months: All Year Statistical Basis: None specified

401 [40 CFR 63.174(b)(3)(ii)]

Connectors in gas/vapor service or light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years. Subpart H. [40 CFR 63.174(b)(3)(ii)]

Which Months: All Year Statistical Basis: None specified

402 [40 CFR 63.174(b)(3)(iii)]

Connectors in gas/vapor service or light liquid service: If a process unit in a biennial leak detection and repair program has less than 0.5 percent leaking connectors during the 2 year monitoring period, the connectors may be monitored one time every 4 years. Subpart H. [40 CFR 63.174(b)(3)(iii)]

403 [40 CFR 63.174(b)(3)(iv)]

Connectors in gas/vapor service or light liquid service: If a process unit complying with the requirements of 40 CFR 63.174(b) using a 4 years monitoring interval program has a greater than or equal to 0.5 percent but less than 1 percent leaking connectors, increase the monitoring frequency to one time every 2 years. The provisions of 40 CFR 63.174(b)(3)(iii) may again be complied with when the percent leaking connectors decreases to less than 0.5 percent. Subpart H. [40 CFR 63.174(b)(3)(iv)]

404 [40 CFR 63.174(b)(3)(v)]

Connectors in gas/vapor service or light liquid service: If a process unit complying with requirements of 40 CFR 63.174(b)(3)(iii) using a 4 year monitoring interval program has 1 percent or greater leaking connectors, increase the monitoring frequency to one time per year. The provisions of 40 CFR 63.174(b)(3)(iii) may again be complied with when the percent leaking connectors decreases to less than 0.5 percent. Subpart H. [40 CFR 63.174(b)(3)(v)]

405 [40 CFR 63.174(c)(1)(i)]

Connectors in gas/vapor service or light liquid service (opened or otherwise had the seal broken): Presence of a leak monitored by 40 CFR 60, Appendix A, Method 21 within three months after being returned to organic HAP service or when it is reconnected. If monitoring detects a leak, repair according to the provisions of 40 CFR 63.174(d), as specified, except as provided in 40 CFR 63.174(c)(1)(ii). Subpart H. [40 CFR 63.174(c)(1)(i)]

Which Months: All Year Statistical Basis: None specified

406 [40 CFR 63.174(c)(2)(i)]

Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Comply with the requirements of 40 CFR 63.169. Subpart H. [40 CFR 63.174(c)(2)(i)]

407 [40 CFR 63.174(c)(2)(ii)]

Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Organic HAP monitored by technically sound method within three months after being returned to organic HAP service after having been opened or otherwise had the seal broken. If monitoring detects a leak, implement repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(c)(2)(ii)]

408 [40 CFR 63.174(d)]

Connectors in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Subpart H. [40 CFR 63.174(d)]

409 [40 CFR 63.174(f)(1)]

Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with 40 CFR 63.174(a) through (c). Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(1)]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER20220001  
 Permit Number: 0130-00233-V0  
 Air - Title V Regular Permit Initial

**FUG 0001 MCA-FUG - Equipment Leaks**

- 410 [40 CFR 63.174(f)(2)] Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of connectors as frequently as practicable during safe to monitor times, but not more frequently than the periodic schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(2)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service (unsafe-to-repair): Demonstrate that repair personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.174(d). Comply with this requirement instead of the requirements in 40 CFR 63.174(a), (d), and (e). Subpart H. [40 CFR 63.174(g)]
- Connectors in gas/vapor service or light liquid service (inaccessible, ceramic, or ceramic-lined): Make a first attempt at repair within 5 days after leak is detected by visual, audible, olfactory or other means, and complete repairs no later than 1.5 calendar days after leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Comply with this requirement instead of the monitoring requirements of 40 CFR 63.174(a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 63.182. Subpart H. [40 CFR 63.174(h)(2)]
- Connectors in gas/vapor service or light liquid service: Calculate percent leaking connectors as specified in 40 CFR 63.174(i)(1) and (i)(2).
- Subpart H. [40 CFR 63.174(i)]
- Comply with the test methods and procedures requirements provided in 40 CFR 63.180. Subpart H.
- Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 63.18 (a) through (k). Subpart H.
- Submit application: Due as soon as practicable before the construction or reconstruction is planned to commence (but it need not be sooner than 90 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H). Submit application for approval of construction or reconstruction required by 40 CFR 63.5(d) in lieu of the Initial Notification. Subpart H. [40 CFR 63.182(b)]
- Submit Notification of Compliance Status: Due within 90 days of the compliance dates specified in the 40 CFR 63 subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(c)(1) through (c)(3). Subpart H. [40 CFR 63.182(c)]
- Submit Periodic Reports: Due semiannually starting 6 months after the Notification of Compliance Status, as required in 40 CFR 63.182(d)
- (c). Include the information specified in 40 CFR 63.182(d)(2) through (d)(4). Subpart H. [40 CFR 63.182(d)]
- Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.
- 411 [40 CFR 63.174(g)]
- 412 [40 CFR 63.174(h)(2)]
- 413 [40 CFR 63.174(i)]
- 414 [40 CFR 63.180]
- 415 [40 CFR 63.181]
- 416 [40 CFR 63.182(b)]
- 417 [40 CFR 63.182(c)]
- 418 [40 CFR 63.182(d)]
- 419 [LAC 33.III.2111]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER20220001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**FUG 0001 MCA-FUG - Equipment Leaks**

420 [LAC 33:III.2199.B]

Compliance with the streamlined program in accordance with this specific condition shall serve to comply with each of the fugitive emission monitoring programs being streamlined. Non-compliance with the streamlined program in accordance with this specific condition may subject the permittee to enforcement action for one or more of the applicable fugitive emissions programs.

a) Permittee shall apply the streamlined program to the combined universe of components subject to any of the programs being streamlined. Any component type which does not require periodic monitoring under the overall most stringent program (40 CFR 63 Subpart H) shall be monitored as required by the most stringent requirements of any other program being streamlined and will not be exempted. The streamlined program will include any exemptions based on size of component available in any of the programs being streamlined.

b) Permittee shall use leak definitions and monitoring frequency based on the overall most stringent program. Percent leaker performance shall be calculated using the provisions of the overall most stringent program. Annual monitoring shall be defined as once every four quarters. Some allowance may be made in the first year of the streamlined program in order to allow for transition from existing monitoring schedules.

c) Permittee shall comply with recordkeeping and reporting requirements of the overall most stringent program. Semiannual reports shall be submitted on January 31 and July 31, to cover the periods July 1 through December 31 and January 1 through June 30, respectively. The semiannual reports shall include any monitoring performed within the reporting periods.

Shall comply with LAC 33:III.2122 and 40 CFR 60 Subpart VVa by implementing the Louisiana Consolidated Fugitive Emission Program. Compliance is achieved through compliance with 40 CFR 63 Subpart H.

The number of each type of component required to be monitored for each monitoring period under applicable leak detection and repair programs shall be reported to the LDEQ by inclusion with each periodic monitoring report. Fugitive emission piping components may be added or removed from the permitted units, without triggering the need to apply for a permit modification, provided that 1) changes in components involve routine maintenance or are undertaken to address safety concerns, or involve small piping revisions with no associated emissions increases, except from the fugitive emissions components themselves; 2) the change do not involve any associated increases in production rate or capacity, or tie in of new or modified process equipment other than the piping components; 3) actual emissions following the changes will not exceed the emission limits of the permit; and 4) the components are promptly incorporated into any applicable LDAR program.

Shall implements the following measures as BACT for CO, VOC, and GHG:

- Use welded connections wherever possible;

- Use seamless pumps or pumps with double mechanical seals in organic service;
- Use rupture discs upstream of relief valves in organic HAP service that relieve to the atmosphere where required by the standards;
- Install flammable organics detectors in the operating area;
- Implement an appropriate LDAR program that meets requirements of 40 CFR 63 Subpart H, except that monitoring of connectors shall be in accordance with TCEQ 28LAER (initially at least quarterly; monitor semiannually if < 0.5% leaking for two consecutive quarterly monitoring periods; monitor annually if < 0.5% leaking for two consecutive semiannual monitoring periods);
- Use IR camera to detect leaks in insulated fugitive components such as flanges and valves on a quarterly basis; and
- Establish a training program consistent with Section 7.2 of EPA's "Leak Detection and Repair: A Best Practices Guide" for Mitsubishi employees that perform Method 21 monitoring.

421 [LAC 33:III.2199.B]

422 [LAC 33:III.501.C.6]

423 [LAC 33:III.509]

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
**Activity Number:** PER20220001  
**Permit Number:** 0180-00233-V0  
**Air - Title V Regular Permit Initial**

**FUG 0002 PM-ROAD - Plant Road Fugitives**

424 [LAC 33:III.1305.A]  
 Prevent particulate matter from becoming airborne by taking all reasonable precautions including, but not limited to, those specified in LAC 33:III.1305.A.1 through A.7.  
 Permittee shall pave all in-plant haul roads, post and limit maximum speed limit at 10 mph, and comply with LAC 33:III.1305 as BACT for PM10/PM2.5.

**UNF 0001 AI-234532 - MCA Geismar Site**

- 426 [40 CFR 60.] All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A.
- 427 [40 CFR 61.357(a)] Submit a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 and is determined by the procedures specified in 40 CFR 61.355(c) to contain benzene. Include the information specified in 40 CFR 61.357(a)(1) through (a)(4). If there is no benzene onsite in wastes, products, by-products, or intermediates, submit an initial report that is a statement to this effect. Subpart FF. [40 CFR 61.357(a)]
- 428 [40 CFR 63.] All affected facilities shall comply with all applicable provisions in 40 CFR 63 Subpart A as delineated in 40 CFR 63 Subparts F, G, H, and DDDDD.
- 429 [40 CFR 82 Subpart F] Comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.
- 430 [LAC 33:III.1103] Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensifies an existing traffic hazard condition are prohibited.
- 431 [LAC 33:III.1303.B] 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.
- 432 [LAC 33:III.2113.A] Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping includes, but is not limited to, the practices listed in LAC 33:III.2113.A.1 through A.5.
- 433 [LAC 33:III.2119] Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
- 434 [LAC 33:III.509] Comply with the requirements of PSD-LA-850. This permit includes provisions of the Prevention of Significant Deterioration (PSD) review from Permit PSD-LA-850.
- 435 [LAC 33:III.5105.A.2] Do not cause a violation of any ambient air standard listed in LAC 33:III.5112, Table 51.2, unless operating in accordance with LAC 33:III.5109.B.
- 436 [LAC 33:III.5107.A.2] Include a certification statement with the annual emission report and revisions to any emission report that attests that the information contained in the emission report is true, accurate, and complete, and that is signed by a responsible official, as defined in LAC 33:III.502.
- 437 [LAC 33:III.5107.A] Include the full name of the responsible official, title, signature, date of signature, and phone number of the responsible official.
- 438 [LAC 33:III.5109.B] Submit Annual Emissions Report : Due annually, by the 30th of April unless otherwise directed by DEQ, to the Office of Environmental Services in a format specified by DEQ. Identify the quantity of emissions in the previous calendar year for any toxic air pollutant listed in Table 51.1 or Table 51.3.
- Determine the status of compliance, beyond the property line, with applicable ambient air standards listed in LAC 33:III.5112, Table 51.2.

**SPECIFIC REQUIREMENTS**

AI ID: 234532 - Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER20220001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

**UNE\_0001 AI-234532 - MCA Geismar Site**

439 [LAC 33:III.5109.C.2]

Develop a standard operating procedure (SOP) within 120 days after achieving or demonstrating compliance with the standards specified in LAC 33:III.Chapter 51. Detail in the SOP all operating procedures or parameters established to ensure that compliance with the applicable standards is maintained and address operating procedures for any monitoring system in place, specifying procedures to ensure compliance with LAC 33:III.5113.C.5. Make a written copy of the SOP available on site or at an alternate approved location for inspection by DEQ.

Provide a copy of the SOP within 30 days upon request by DEQ.  
 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, LAC 33:III.537]

Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 5 when DEQ declares an Air Pollution Alert.

Activate the preplanned strategy listed in LAC 33:III.5611.Table 6 when DEQ declares an Air Pollution Warning.

Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 7 when DEQ declares an Air Pollution Emergency.

Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency. Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.5611. Tables 5, 6, and 7.

Comply with the provisions of 40 CFR 68 as incorporated in LAC 33:III.Chapter 59. Modifications or exceptions provided in LAC 33:III.5901.C shall not relieve the permittee from the obligation to comply timely with any otherwise applicable condition of 40 CFR 68.

Identify hazards that may result from accidental releases of the substances listed in 40 CFR 68.130, Table 59.0 of LAC 33:III.5907, or Table 59.1 of LAC 33:III.5913 using appropriate hazard assessment techniques, design and maintain a safe facility, and minimize the off-site consequences of accidental releases of such substances that do occur.

Submit amended registration: Due to the Office of Environmental Compliance within 60 days after the information in the submitted registration is no longer accurate.

Submit Emission Inventory (EI)/Annual Emissions Statement : Due annually, by the 30th of April to the Office of Environmental Assessment, 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.

Report the unauthorized discharge of any air pollutant into the atmosphere in accordance with LAC 33:III.Chapter 39, Notification Regulations and Procedures for Unauthorized Discharges. Submit written reports to DEQ pursuant to LAC 33:1.3925. Submit timely and appropriate follow-up reports detailing methods and procedures to be used to prevent similar atmospheric releases.

440 [LAC 33:III.535]

441 [LAC 33:III.5609.A.1.b]  
 442 [LAC 33:III.5609.A.2.b]  
 443 [LAC 33:III.5609.A.3.b]  
 444 [LAC 33:III.5609.A]

445 [LAC 33:III.5901.A]

446 [LAC 33:III.5907]

447 [LAC 33:III.5911.C]

448 [LAC 33:III.919]

449 [LAC 33:III.927]

**General Information**

AI ID: 234532 Mitsubishi Chemical America Inc - MCA Geismar Site  
 Activity Number: PER20220001  
 Permit Number: 0180-00233-V0  
 Air - Title V Regular Permit Initial

Alternate Identifiers	Name	User Group	Dates
	CDS Number	CDS Number	
Physical Location:	36453 Hwy 30 (portion of) Geismar LA 70734	Facility Email: mca.airperm@m-chem.com	
Mailing Address:	6070 Poplar Ave Ste 600 Memphis TN 38119	Main Phone: 9013812312	
Location of Front Gate:	-90.997611 Longitude, 30.207228 Latitude, Coordinate Method: Lat.\Long. - DMS, Coordinate Datum: NAD83		
Related People:	<b>Mail Address</b>	<b>Work Phone</b>	<b>Relationship</b>
Hootan Hidaji	6070 Poplar Ave Ste 600 Memphis, TN 38119	9013812312	Hootan.hidaji@m-chem.com Responsible Official for
Related Organizations:	<b>Mailing Address</b>	<b>Work Phone</b>	<b>Relationship</b>
Mitsubishi Chemical America Inc	6070 Poplar Ave Ste 600 Memphis, TN 38119	9013812312	Air Billing Party for Operates
SIC Codes:	2821, Plastics materials and resins		
NAIC Codes:	325211, Plastics Material and Resin Manufacturing		

**Note:** This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required, or if you have questions regarding this document, please email the Permit Support Services Division at facupdate@la.gov.