TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 6, 2025

THE HONORABLE LOIS KOLKHORST
TEXAS SENATE
PO BOX 12068
AUSTIN TX 78711-2068

Re: Accepted Federal Operating Permit Renewal Application
Project Number: 37628
Permit Number: O4165
Formosa Plastics Corporation, Texas
Olefins 3 And Propane Dehydrogenation (pdh) Plant
Point Comfort, Calhoun County
Regulated Entity Number: RN100218973
Customer Reference Number: CN600130017

Dear Senator Kolkhorst:

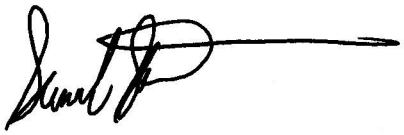
This letter notifies you that the Texas Commission on Environmental Quality has received a federal operating permit (FOP) renewal application for a site located in your district. As part of this permitting process, the applicant is required to publish a formal newspaper public notice. The notice will inform the public of their right to make comments or request a public hearing. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For exact location, refer to application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.547222,28.688888&level=13.

The FOP program regulates both new and existing major sources of emissions. The goal of the program is to improve air quality in Texas through increased compliance by codifying existing applicable regulatory requirements into the FOP. The FOP provides the applicant authorization to operate the equipment at the site. The FOP identifies and codifies air emission requirements (known as applicable requirements) that apply to the emission units at the site. The FOP does not authorize construction of emission units or emissions from those units. The New Source Review (NSR) permit is the mechanism for these authorizations.

Re: Accepted Federal Operating Permit Renewal Application

This letter is being sent to you for information only and no action is required. If you need further information, please contact me at (512) 239-1250.

Sincerely,



Samuel Short, Deputy Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 6, 2025

THE HONORABLE JOSE M LOZANO
TEXAS HOUSE OF REPRESENTATIVES
PO BOX 2910
AUSTIN TX 78768-2910

Re: Accepted Federal Operating Permit Renewal Application
Project Number: 37628
Permit Number: O4165
Formosa Plastics Corporation, Texas
Olefins 3 And Propane Dehydrogenation (pdh) Plant
Point Comfort, Calhoun County
Regulated Entity Number: RN100218973
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Sincerely,

Samuel Short, Deputy Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

Carolyn Thomas

From: eNotice TCEQ
Sent: Thursday, March 6, 2025 2:30 PM
To: Lois.Kolkhorst@senate.texas.gov; JM.lozano@house.texas.gov
Subject: TCEQ Notice - Permit Number O4165
Attachments: TCEQ Notice - O4165_37628.pdf

This email is being sent to electronically transmit an official document issued by the Office of Air of the Texas Commission on Environmental Quality.

This email is being sent to you because either (a) you filed a document with the Office of the Chief Clerk that made you part of the official mailing list for the above referenced matter, or (b) notice to you is legally required. As authorized by Texas Water Code 5.128, this electronic transmittal is replacing the previous practice of hard copy distribution. Amendments to Texas Government Code 552.137 prompted a change to the agency's privacy policy regarding confidentiality of certain email addresses. The revised privacy policy can be viewed at http://www.tceq.state.tx.us/help/policies/electronic_info_policy.html.

Questions regarding this email may be submitted either by replying directly to this email or by calling Mr. Jesse Chacon, P.E. with the Air Permits Division at (512) 239-5759.

The attached document is provided in an Adobe Acrobat .pdf format. If you cannot display the attachment, you may need to visit the Adobe web site (http://get.adobe.com/reader) to download the free Adobe Acrobat Reader software.

Formosa Plastics®

Formosa Plastics Corporation, Texas
201 Formosa Drive • P.O. Box 700
Point Comfort, TX 77978
Telephone: (361) 987-7000

February 3, 2025

Electronic Delivery via STEERS

Texas Commission on Environmental Quality
Air Permits Initial Review Team (APIRT) (MC-161)
P. O. Box 13087
Austin, Texas 78711-3087

RE: Formosa Plastics Corporation, Texas
OL3 Plant Title V SOP Renewal Application
TCEQ Air Quality Project Number: TBA
TCEQ Title V Permit Number: O4165
Customer Reference Number: CN600130017
Regulated Entity Number: RN100218973
TCEQ Air Quality Account Number CB0038Q

To Whom It May Concern:

Formosa Plastics Corporation, Texas (FPC TX) is submitting the enclosed Title V Site Operating Permit (SOP) renewal application for the Olefins 3 (OL3) and Propane Dehydrogenation (PDH) Plants located in Point Comfort, Calhoun and Jackson Counties, Texas.

This submittal constitutes a timely renewal application as it is being submitted at least six months and no earlier than 18 months before the current authorization to operate (ATO) expires on August 12, 2025.

The enclosed renewal application for Permit No. O4165 meets the requirements for a SOP renewal application per 30 TAC Chapter 122. The enclosed application includes the following TCEQ forms: OP-CRO1, OP-1, OP-2, OP-SUMR, OP-PBRSUP, OP-ACPS, OP-REQ1, OP-REQ2, OP-REQ3, and OP-UA forms.

Should you have any questions, please contact Ms. LeAnn Usoff at leannu@ftpc.fpcusa.com or by telephone at (361) 920-9401.

Sincerely,

Mike Rivet

Digitally signed by Mike Rivet
DN: cn=Mike Rivet, o=FPCTX, ou=GMO, email=mikerivet@ftpc.fpcusa.com, c=US
Date: 2025.01.30 14:57:57 -06'00'

Mike Rivet
Assistant Vice President/General Manager
Formosa Plastics Corporation, Texas

Enclosure

CC: Electronic Delivery via STEERS
Air Program Manager, Region 14
Texas Commission on Environmental Quality
500 North Shoreline Blvd, Ste 500
Corpus Christi, Texas 78401-0318
(Copy of the Application)

Electronic Delivery: R6AirPermitsTX@epa.gov
EPA Region 6

February 2025

RENEWAL APPLICATION FOR OL3 & PDH PLANT TITLE V SITE OPERATING PERMIT (SOP) NO. O4165

Formosa Plastics Corporation, Texas
Olefins 3 (OL3) and Propane Dehydrogenation (PDH) Plant
Point Comfort, Texas

Customer Reference No. CN600130017
Regulated Entity No. RN100218973

Submitted To:
Texas Commission on Environmental Quality
Air Division
P.O. Box 13087
Austin, Texas 78711-3087

PROJECT NUMBER:
151821.01.01

POWER ENGINEERS

TABLE OF CONTENTS

APPENDICES:

1.0 INTRODUCTION AND APPLICATION ORGANIZATION

Formosa Plastics Corporation, Texas (FPC TX) currently operates a number of chemical manufacturing plants at their complex near Point Comfort, in Calhoun and Jackson Counties, Texas. FPC TX's Olefins 3 Plant (OL3) and the not-yet-constructed Propane Dehydrogenation (PDH) Plant are in Calhoun and Jackson Counties, Texas. The OL3 & PDH Plants are currently authorized by New Source Review (NSR) Air Quality Permits No. 107518 and PSDTX1383M1, and Title V Site Operating Permit (SOP) O4165.

FPC TX is subject to EPA's new Residual Risk and Technology Review (RTR) requirements in (1) the Ethylene Maximum Achievable Control Technology (EMACT) rule (40 CFR 63, Subpart YY), as promulgated in the July 6, 2020 *Federal Register*, and (2) the Miscellaneous Organic National Emissions Standards for Hazardous Air Pollutants (NESHAP) (MON) rule (40 CFR 63, Subpart FFFF), as promulgated in the August 12, 2020 *Federal Register*.

The PDH Unit is a not-yet-constructed MON Chemical Process Unit (MCPU) covered under the OL3's SOP No. O4165. Although the PDH Unit will be located within the boundary limits of the OL3 Plant, FPC TX has elected not to address new MON RTR requirements that affect the PDH Unit in this renewal application. This choice was made because the construction timeline for PDH is not yet firmly established. Once a construction schedule is finalized and construction commences on the PDH Unit, FPC TX will submit a separate SOP application to address all MON RTR requirements that impact the PDH MCPU. FPC TX is aware that the PDH Unit cannot commence operations until all applicable MON RTR requirements are incorporated into SOP No. O4165.

The OL3 Unit generates process vent streams that are subject to 40 CFR 63, Subpart YY Ethylene MACT (EMACT) requirements for Ethylene Manufacturing Process Units (EMPUs). These EMACT vent streams are controlled by the OL3 flare system. The OL3 flare system must therefore include the new MACT Subpart YY RTR flare requirements in their Title V SOP permits.

It should be noted that the new MON and EMACT RTR flare requirements are virtually identical in that both the MON and EMACT RTR regulations incorporate by reference Petroleum Refinery MACT flare requirements found in 40 CFR §63.670 and §63.671.

Contents and Organization of this SOP Renewal Application

FPC TX is submitting this timely Title V SOP renewal application at least six months, but no earlier than eighteen months, before the date of expiration of the authorization (August 12, 2025) per the requirements in 30 TAC §122.133. This application contains the following updated information required for Title V SOP renewal application procedures as detailed in 30 TAC §122.243 as well as additional supporting information.

Sections 2.0, 3.0, and 4.0 of this application include site descriptive information such as the site location map, plot plan, and process information. Section 5.0 and the application appendices contain the required TCEQ application forms and other information as detailed in this application's Table of Contents.

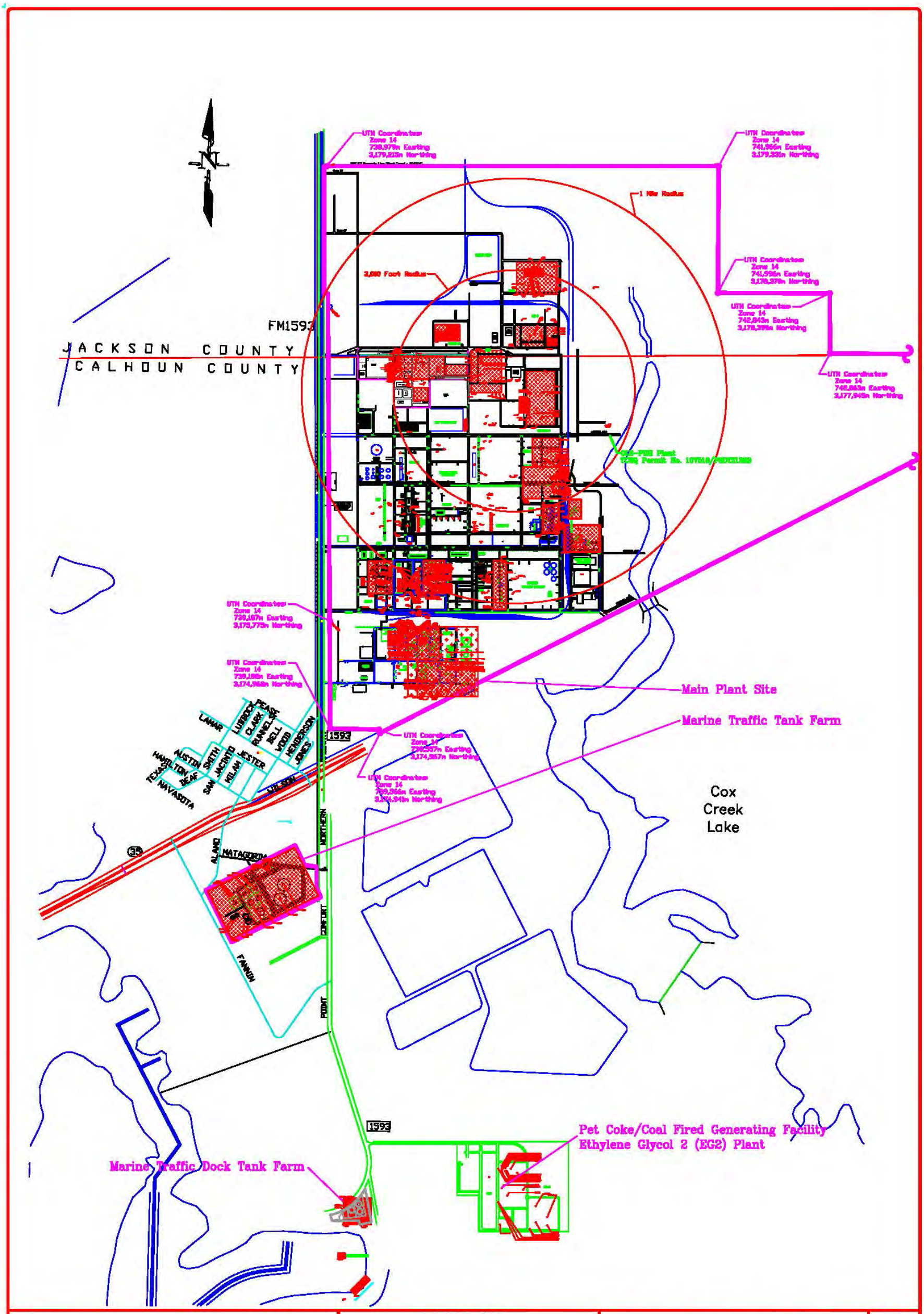
FPC TX is aware that many Title V SOP permits have faced EPA comments because the permit contains "high-level" citations. After discussions with TCEQ's permitting staff, FPC TX wants to proactively address this as follows. In support of the regulatory citations presented in Form OP-REQ3 in Appendix C and based on a recommendation from TCEQ, more in-depth regulatory citations are being provided in Appendix D. The intent of this additional appendix is to assure TCEQ and the General Public that this

Title V SOP application contains the detailed level of regulatory citation specificity required for Title V SOP applications. These citations are derived from an Excel file that FPC TX developed to identify all newly applicable citations resulting from the EMACT RTR rulemaking. Additional information on how Appendix D is constructed can be found in Section 3 and Table 2 of this application.

2.0 SITE LOCATION MAP AND PLOT PLANS

The OL3 Plant is located at the FPC TX Point Comfort Site, which is immediately east of Farm Road 1593, west of Cox Creek, and north of State Highway 35. The OL3 Plant is located in Calhoun and Jackson Counties. A scaled area map that shows the location of the OL3 Plant is included in this section.

A detailed plot plan of the OL3 Plant showing the facilities included in this application is contained in this section. Emission points are identified on the detailed plot plan.



Formosa Plastics®

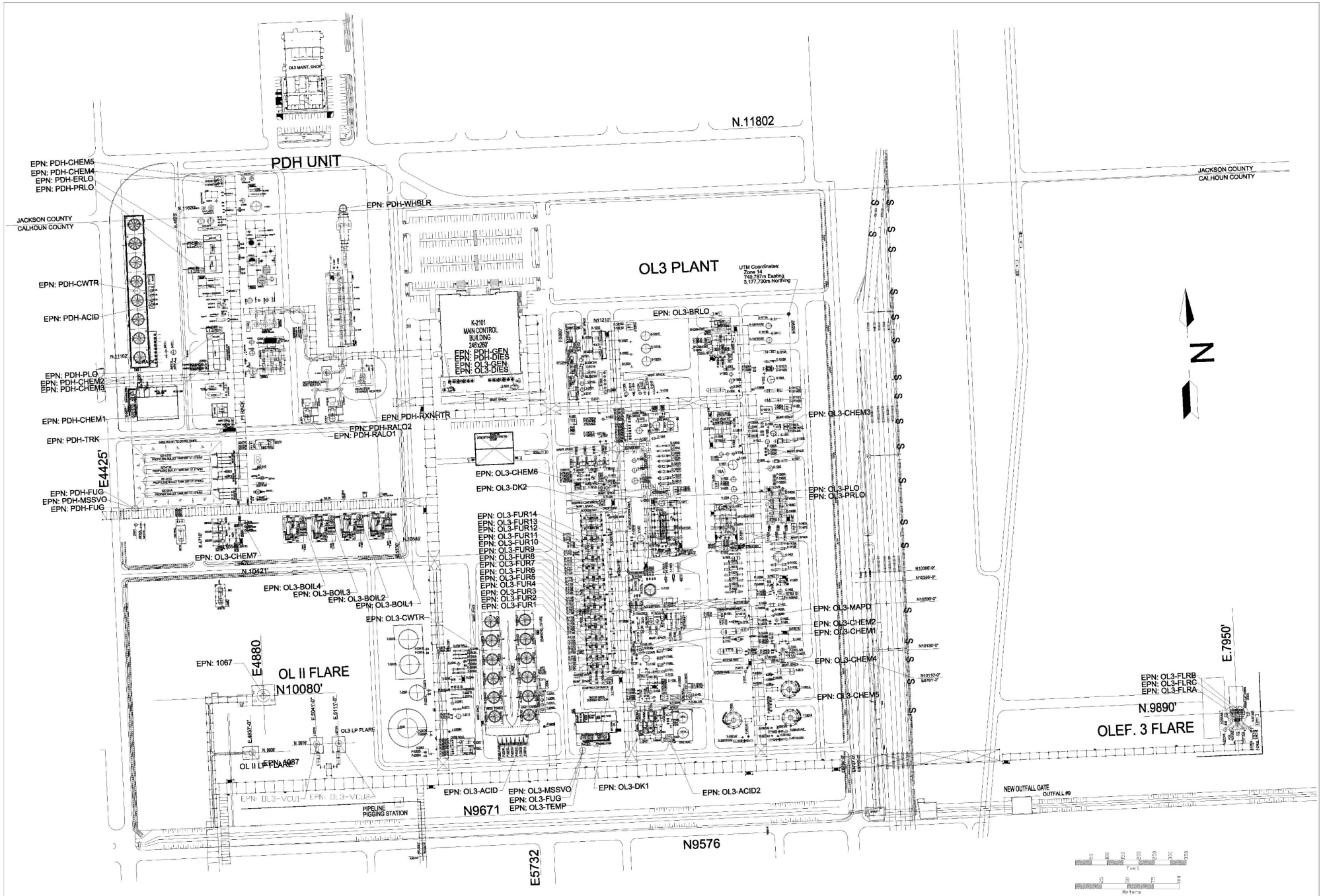
OVERALL VIEW
SHEET LAYOUT

FPC TX Area Map-Overall Plot Plan; OLS-PDH

FORMOSA PLASTICS CORP. TEXAS

SHEET 1 OF 1

FPC-TX Area Map-Overall - OLS-PDH 12.18.18.dwg



FORMOSA PLASTICS CORPORATION - TEXAS
Point Comfort, Texas

OL3 AND PDH UNITS

3.0 NEW EMACT AND MON RTR REQUIREMENTS

EMACT RTR Flare Requirements

FPC TX is subject to EPA's new Residual Risk and Technology Review (RTR) requirements in the Ethylene Maximum Achievable Control Technology (MACT) rule (40 CFR 63, Subpart YY), as promulgated in the July 6, 2020 *Federal Register*. In this application FPC TX is seeking to update the OL3 SOP No. O4165 to reflect the regulatory, physical, and operational changes to the OL3 flare emission control system. These changes were authorized by TCEQ in a PCP Standard Permit Registration No. 167823 issued February 18, 2022. Except for limited EMACT exceptions identified at 40 CFR §63.1103(e)(4), the EMACT RTR rule requires that flares comply with Petroleum Refinery MACT (40 CFR 63, Subpart CC) flare requirements specified at 40 CFR §63.670 and §63.671.

Applicability for Existing OL3 Elevated Flare System Covered Under NSR Permit No. 107518

For the existing OL3 steam-assisted elevated flare system (OL3-FLRA/B/C) TCEQ specified traditional NSR permit flare requirements based on 40 CFR §60.18 as specified in NSR Permit No. 107518 Special Condition No. 10. The new EMACT RTR flare requirements replace and supersede the NSPS General Provision and MACT General Provision flare requirements of 40 CFR §60.18 and 40 CFR §63.11, respectively, as specified at 40 CFR §63.1100(g)(7)(i). The new EMACT RTR requirements for flares incorporate by reference most of the flare requirements in the Petroleum Refinery MACT, found at 40 CFR 63, Subpart CC at §63.670 and §63.671.

Treatment of all OL3 Elevated Steam Assisted Flares in this Application

TCEQ has administratively addressed the new requirements for the three existing steam-assisted elevated flares at OL3 in Table 6 of the Flare Unit Attributes Form UA-7, which is provided in Appendix E. However, for completeness, new EMACT RTR flare requirements are also documented in Form OP-REQ3 in Appendix C. Because of the volume and complexity of the new EMACT RTR requirements, FPC TX is providing clarifying regulatory citation documentation in support of Form OP-REQ3 in Appendix D. In post-RTR operations, the flares will no longer be required to comply with 40 CFR §60.18 and §63.11, as specified at 40 CFR §63.1100(g)(7)(i).

Incorporation of AMOCs

As specified at 40 CFR §63.1102(c), the original EMACT RTR compliance deadline for OL3 is July 6, 2023. However, FPC TX has applied for and received from TCEQ a one-year compliance extension, until July 6, 2024, for the flare-related RTR provisions. This compliance extension is provided in Appendix F in the form of a TCEQ-approved Alternative Method of Compliance (AMOC) No. 213, dated September 23, 2022. This AMOC is being incorporated into SOP No. O4165 with this renewal. In addition, Appendix F also contains the TCEQ-approved AMOC No. 66 issued on December 14, 2016. This AMOC allows the use of an alternative method for testing VOCs in cooling water. Lastly, Appendix F contains AMOC No. 234 issued by the TCEQ on February 2, 2024. This AMOC aligns FPCTX's reporting cycle to the new MACT YY reporting cycle. FPCTX is proposing to incorporate these AMOCs into SOP No. O4165 with this renewal.

EMACT RTR Non-Flare Requirements

In this application, FPC TX is also addressing all new non-flare EMACT RTR requirements using Form OP-REQ3 in Appendix C. Because of the volume and complexity of the new EMACT RTR requirements,

FPC TX is providing clarifying regulatory citation documentation in support of Form OP-REQ3 in Appendix D. In part, this approach is being taken because TCEQ has not yet developed new Unit Attribute forms to address all EMACT RTR requirements. These new EMACT RTR requirements documented in Appendices C and D include but are not limited to:

- Maintenance Vent (MV) requirements
- Bypass Vent (BV) requirements
- Storage Vessel Degassing (SVD) requirements
- Atmospheric Pressure Relief Device (APRD) monitoring and release requirements
- Cooling Water Tower Heat Exchange System (CWTHES) requirements
- Ethylene cracking furnace decoking operation requirements
- Ethylene cracking furnace isolation valve inspection requirements
- Revised startup, shutdown, and malfunction requirements

Documentation of EMACT RTR Applicability and Rule Changes

To facilitate documentation of the new flare and non-flare EMACT RTR requirements into Form OP-REQ3, the following unit and group IDs either already exist or are being established in Form OP-SUMR in Appendix A.

- GRP-ESAF – this new group ID captures all EMACT RTR and other requirements for the three existing Elevated Steam-Assisted Flares at OL3 (Unit ID Nos: OL3-FLRA/B/C).

- GRP-OL3DK – this new group ID covers the two Decoke Drums at OL3 (EPNs: OL3-DK1, OL3-DK2). The new EMACT RTR requirements for ethylene Furnace Decoking and Isolation Valve Inspections at OL3 will be assigned to this new group ID.

- OL3-MV – this new unit ID captures all OL3 Maintenance Vents (MVs) in OHAP service that are subject to new EMACT RTR MV requirements.

- OL3-BL – this new unit ID captures all OL3 Bypass Lines (BLs) in OHAP service that are subject to new EMACT RTR BL requirements.

- OL3-SVD – this new unit ID captures all Storage Vessel Degassing (SVD) operations at OL3 that are subject to new EMACT RTR SVD requirements.

- OL3-APRD – this new unit ID captures all OL3 Atmospheric Pressure Relief Devices (APRDs) in OHAP service that are subject to new EMACT RTR APRD requirements.

- OL3-CTWR – this existing unit ID covers the OL3 cooling tower. The new EMACT RTR requirements for cooling water tower heat exchange systems (found at 40 CFR 63, Subpart XX) will be assigned to this existing unit ID.

- OL3-EMPU – this new unit ID captures all OL3 Ethylene Manufacturing Process Unit (EMPU) equipment items in OHAP service that are subject to the new EMACT RTR Startup, Shutdown, Malfunction and Maintenance (SSMM) requirements, and it also captures other miscellaneous requirements that apply to the entire OL3 EMPU.

SOP Index Numbers Established to Document Post-RTR EMACT Requirements

In support of the regulatory citations presented in Form OP-REQ3 in Appendix C and based on a recommendation from TCEQ, more in-depth regulatory citations are being provided in Appendix D. In Table 2, FPC TX has established SOP Index Numbers for new post-RTR EMACT requirements.

Table 2 also shows the requirements associated with each SOP Index Number, the applicable Title V Revision Number as presented in TCEQ Form OP-2 Table 2, and the section of Appendix D that corresponds to the citations associated with the SOP Index Number. For example, Appendix D contains a Master List of all regulatory citations. Appendix D also contains separate sections which are filtered from the Master List to show how the regulatory citations in Table 2 are parsed by SOP Index Number. For example, Appendix D6 is filtered to contain only the EMACT post-RTR citations associated with SOP Index No. 63YY-13, which covers the new requirements for ethylene furnace docking and isolation valve inspections.

Table 2
Proposed SOP Index Numbers and Descriptions for Post-RTR EMPU Operations

Appendix D Section and SOP Index Numbers	OP-SUMR Table 2 Group IDs	Unit IDs	SOP Index Number Description	OP-2 Table 2 Revision Numbers
D-Master Master List	All	All	All new EMACT RTR Requirements for Inclusion in SOP No. O4165	4 – 11
D1 63YY-8	GRP-ESAF	OL3-FLRA/B/C	MACT YY Post-RTR Requirements for Elevated Steam-Assisted Flares (ESAFs)	4
D2 63YY-9	NA	OL3-MV	MACT YY Post-RTR Maintenance Vent (MV) Requirements	5
D3 63YY-10	NA	OL3-BL	MACT YY Post-RTR Bypass Line (BL) Requirements	6
D4 63YY-11	NA	OL3-SVD	MACT YY Post-RTR Storage Vessel Degassing (SVD) Requirements	7
D5 63YY-12	NA	OL3-APRD	MACT YY Post-RTR Atmospheric Pressure Relief Device (APRD) Requirements	8
D6 63YY-13	GRP-OL3DK	OL3-DK1 OL3-DK2	MACT YY Post RTR Requirements for Ethylene Furnace Decoking and Valve Inspections (FDVI)	9
D7 63XX-1	NA	OL3-CTWR	MACT XX Post-RTR Cooling Water Tower Heat Exchange System (CWTHES) Requirements	10
D8 63YY-14	NA	OL3-EMPU	MACT YY Post-RTR for EMPU Startup, Shutdown, Malfunction and Maintenance Requirements, and Other Miscellaneous EMPU-wide Requirements	11

4.0 PROCESS DESCRIPTION AND FLOW DIAGRAM

This section includes a process description and block flow diagram for the OL3 Plant design.

Olefins 3 Plant Process Description

The OL3 Plant is designed to produce high purity ethylene product. Fresh imported ethane feed received from the outside batter limits (OSBL) is combined with recycled ethane from the ethylene fractionator. The combined stream is superheated (with quench water) prior to entering the thane feed saturator. A process flow diagram for the OL3 Plant is included at the end of this section.

Saturator:

In the saturator, the ethane feed is saturated with water by humidification. And the humidified ethane feed from the saturator is superheated in a low pressure (LP) steam heated exchanger. The heated ethane/steam mixture is then fed to the 14 pyrolysis furnaces (FIN/EPNs: OL3-FUR1 through OL3-FUR14).

Pyrolysis Furnaces:

The feed stream is further preheated in the convection section of each furnace before entering the radiant coils where the thermal cracking of the feed occurs. The radiant heat in the furnace is provided by fuel gas fired hearth (floor fired) and wall burners. The combustion product stream from the fuel gas firing is routed through the convection section in the upper part of the furnace where the feed is preheated. The combustion products are routed through a selective catalytic reduction (SCR) unit located in the convection section of the furnace before being released to the atmosphere (EPNs: OL3-FUR1 through OL3-FUR14).

The product stream (cracked gas) from the furnace radiant coils (3) is routed through heat exchangers where heat is recovered by boiler feed water to produce superheated high pressure (SHP) steam. The product stream from the furnace is sent to the quench tower.

Decoking:

The temperatures in the radiant coils of the furnaces, which are required to accomplish the thermal cracking of the feed, also result in coke accumulation in the coils. As the coke accumulates, it decreases the heat transfer in the coil and interferes with the efficiency of the furnace operation. Then, the furnace is decoked to remove the coke and restore efficient furnace operation. Furnaces are decoked in a staggered cycle; so, while the decoking process is occurring in some furnaces, others may be concurrently operated in the thermal cracking mode of operation.

The decoking process involves the following steps:

1. The furnace is taken out of normal operation by removing the hydrocarbon feed.
2. Steam is added to the furnace tubes to purge hydrocarbon to the process equipment downstream.
3. After the hydrocarbons are removed, steam is rerouted to the decoke drum.
4. Air is injected into the steam going through the coils of the furnace to enhance the burning effect and loosening of coke.

5. The steam / air decoking continues until all of the coke is removed and the coils are clean again so they can be used efficiently to crack hydrocarbons when put back into service.

6. Once the coils are clean, the air is stopped, and the steam continues to purge out the oxygen before the furnace is put back in normal operation.

7. The effluent from the decoking process, consisting of mainly steam and air, is directed to one of two solid separators called decoke drums (FIN/EPNs: OL3-DK1 & OL3-DK2).

Quench Tower:

During the cracking process in the furnace, ethylene is produced along with a number of other hydrocarbon products (cracked gas). The cracked gas from the furnaces is cooled and partially condensed by direct countercurrent contact with re-circulating water in the quench tower. The condensed heavy hydrocarbons and dilution steam along with quench water are separated in the bottom section of the quench tower. The quench water circulation provides low-level heat to various process users.

The heavy hydrocarbons which may accumulate at the bottom of the quench tower are exported as fuel oil.

Process Water Stripper:

The dilution steam condensed in the quench tower is sent through a filter system, which removes the suspended solids and dispersed oil from the process water, and then to the process water stripper where it is stripped with steam to remove acid gases (e.g., CO_2 and trace H_2S formed from side reactions in the pyrolysis furnaces) and light hydrocarbons. A portion of the process water leaving the bottom of the process water stripper is drawn off as blowdown to maintain the process water balance in the system. This process water blowdown is sent to the existing complex water treatment plant (CWTP). The remainder of the process water leaving the bottom of the process water stripper is recycled back to the ethane feed saturator. The overhead vapor leaving the process water stripper, which consists of acid gases and light hydrocarbons, is sent back to the quench water tower where the light hydrocarbons can be recovered. The acid gases continue to be carried through the process until they are removed in the caustic/water wash tower (described below).

Process Gas Compressor:

The quench tower overhead vapors are compressed in a steam turbine-driven centrifugal process gas compressor with inter-stage cooling provided by cooling water. Wash oil is injected at the inlet of each stage of the process gas compressor charge and on the casing to mitigate fouling.

Caustic/Water Wash Tower:

After compression the process gas, called charge gas, is sent to a three-stage caustic/water wash tower for complete removal of acid gases (e.g., CO_2 and trace H_2S) from the process gas using a 20% caustic solution. The 20% caustic solution is supplied by pipeline from OSBL.

Spent Caustic Oxidation Unit:

The spent caustic blowdown from the caustic/water wash tower is routed to a collection tank. The spent caustic blowdown from the caustic/water wash tower is discharged to a biological wastewater treatment

plant. The acid required for the spent caustic neutralization will be stored in tanks FIN/EPNs: OL3-ACID through OL3-ACID2 (a small portion of this acid is also used for the cooling tower pH control).

Charge Gas Drying and Cooling:

Charge gas from the caustic/water wash tower overhead is sent through a drier feed KO drum for moisture removal and then to the charge gas driers where the process gas is dried in a molecular sieve drying system. The molecular sieve driers are regenerated using methane and hydrogen-rich tail gas (from the deethanizer overhead) as the regeneration gas. The vapor from the charge gas driers is cooled (by propylene refrigerant) before entering the deethanizer. The propylene refrigeration system is described later in the process description.

Deethanizer:

The Deethanizer tower produces a vapor overhead, which is comprised mostly of C2 compounds, which is sent to the acetylene converter (ACU). The bottoms stream from the deethanizer, comprised of C3 and heavier compounds, is sent to the depropanizer for additional processing.

Acetylene Converter:

The ACU employs a catalyst to convert acetylene to ethylene by selective hydrogenation. The outlet of the ACU, which is rich in hydrogen, methane, ethylene, and ethane, is further processed in the demethanizer tower.

Demethanizer:

In the demethanizer, methane and hydrogen are separated as overheads which are routed to the fuel gas system. This overhead stream is high in hydrogen content. Some amount of the hydrogen is recovered in a pressure swing absorption (PSA) system, while the remainder of the hydrogen and hydrocarbons are used as fuel gas for the pyrolysis furnaces in combination with other fuel streams (as described in the fuel gas system description below). The demethanizer bottoms proceeds to the ethylene fractionator for product recovery.

Ethylene Fractionator:

The ethylene fractionator is designed to produce a high purity ethylene product to be used as feed for other units at the Point Comfort complex (replacing purchased feed), stored or exported to pipeline. The ethylene fractionator bottoms stream (composed primarily of ethane) is recycled and combined with the fresh ethane feed from OSBL before the feed saturator.

Depropanizer:

The bottoms from the deethanizer are routed to the depropanizer to separate the C3 components from the C4 heavier components. The overhead stream from the depropanizer contains C3 compounds.

Methyl Acetylene and Propadiene Converter:

The methyl acetylene (MA) and propadiene (PD) contained in the depropanizer overhead are removed by selective hydrogenation to propylene and propane in a single-bed reactor called the MAPD converter. Hydrogen is injected into the overhead stream from the depropanizer before entering the MAPD converter.

The MAPD converter system consists of two reactors: one operating and one spare. This allows one reactor to be regenerated while the other reactor is performing the conversion. The MAPD catalyst must be periodically regenerated as polymer accumulates on the catalyst surface during normal operation. During regeneration, vent gas (primarily steam) is emitted to the atmosphere via the regeneration vent (FIN/EPN: OL3-MAPD). The regeneration vent stream may contain trace VOCs and CO (as a result of burning the oxidized polymer).

The C3 portion of the MAPD effluent stream will be further processed in the existing propylene purification unit (PPU) or OL2 located in the existing Olefins complex. The remainder is recycled back to the depropanizer.

De-butanizer:

The bottoms product from the depropanizer flows to the debutanizer where the mixed C4s overhead product (19) is separated for export. The debutanizer bottoms/pygas product, is also exported after cooling with cooling water.

Refrigeration Systems:

The OL3 Plant features two separate closed-loop refrigerant systems: a propylene system and a binary refrigerant system. Both systems utilize a steam turbine-driven centrifugal compressor to provide refrigeration at various levels. The binary refrigerant (BR) system combines methane and ethylene as a single stream of constant composition refrigerant.

Fuel Gas System:

The fuel gas mixing drum combines the following streams: hydrogen-rich gas from the dryer regeneration system (deethanizer overhead), methane-rich off gas from the chilling train (demethanizer overhead), pressure swing adsorption (PSA) off-gas and natural gas from OSBL. This fuel gas mixture is filtered and supplied to combustion sources including the furnaces and steam boilers.

Flare and Vapor Combustor Systems:

The elevated flare system (FIN/EPNs: OL3-FLRA, OL3-FLRB, OL3-FLRC) is a three-stage flare system designed to provide safe control for vent gas streams that cannot be recycled in the process or routed to the fuel gas system. Waste gases generated during normal operation and routine maintenance are routed to either of the three flare tips. The 1st-, 2nd-, and 3rd-stage flare tips are operated with natural gas pilots.

Two vapor combustor units (FIN/EPNs: OL3-VCU1 and OL3-VCU2) will control breathing losses from existing API product tanks, spent caustic tanks and the wash oil chemical tank.

Emergency Engine:

In the event of a power outage, an emergency generator (FIN/EPN: OL3-GEN) will supply power to operate valves and other critical equipment in the OL3 Plant. A diesel storage tank is also provided for the generator (FIN/EPN: OL3-DIES).

Auxiliary Storage Tanks:

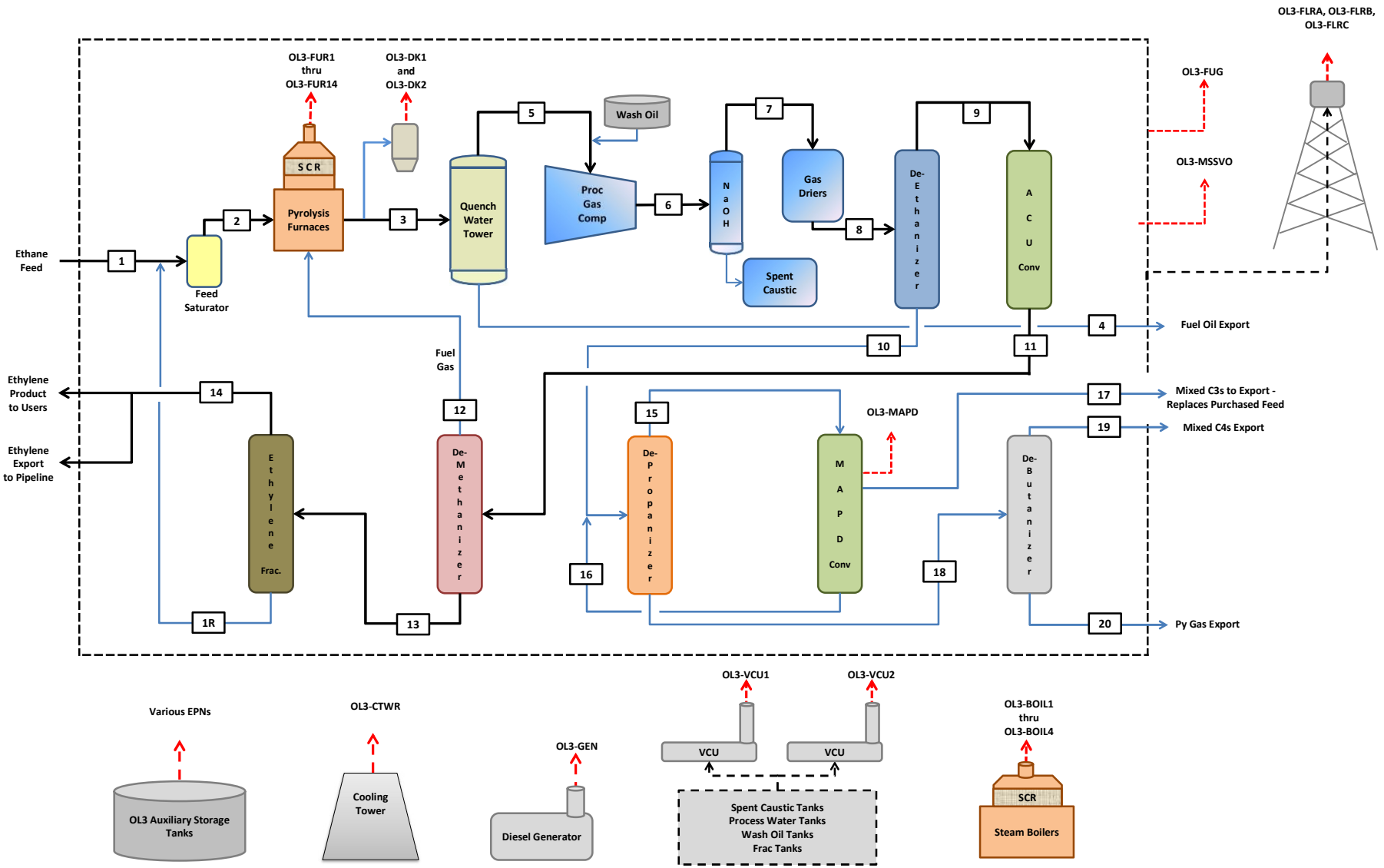
The olefins processes employ large process gas and refrigerant compressors. Due to process operating pressures, these compressors require several stages of compression and are driven by large steam turbines.

In order to keep these machines operating reliably, lube oil systems are installed to ensure proper lubrication of the turbine and compressor bearings. The lube oil tanks shown on the process flow diagram will act as a reservoir for the recirculating lube oil (FIN/EPNs: OL3-PLO, OL3-PRLO, and OL3-BRLO).

Antifoulants, product inhibitors, and amines (for pH control) are also used throughout the unit to help preserve and maintain equipment in good working order. These materials are stored in relatively small, fixed-roof storage tanks. The FINs associated with these chemical additive tanks are OL3-CHEM1 through OL3-CHEM10. Aqueous ammonia will be stored in a pressurized (bullet style) tank for use in the unit's SCR systems. Other tank sources include 2 frac tanks (FINs: OL3-Frac1 and OL3-Frac2) and chemical totes (EPNs: T-1152, T-1253, and T2451).

Cooling Tower:

One cooling tower (FIN/EPN: OL3-CTWR) will provide cooling of various process streams. Gaseous chlorine will be used as a biocide in the cooling tower. Chlorine is stored in cylinders next to the cooling towers.



PROCESS FLOW DIAGRAM

Olefins 3 (OL3) Plant

Formosa Plastics Corporation, Texas
Point Comfort, TX

POWER ENGINEERS	Revised By:	Reviewed By:	Project No:	Date:
	E. Quiat	S. Wang	245239	11/22/2023

5.0 TITLE V APPLICATION FORMS

General and Administrative Forms

Appendix A of this application includes the general and administrative forms and supporting information required by the SOP renewal process, 30 TAC §122.243. These forms and other data include the following:

- OP-CRO1 (Certification by Responsible Official);
- OP-1 (Site Information Summary);
- OP-2 (Application for Permit Revision/Renewal);
- OP-SUMR (Individual Unit Summary for Revisions);
- OP-PBRSUP (Permits by Rule Supplemental Table); and
- OP-ACPS (Application Compliance Plan and Schedule)

Potentially Applicable Requirements Forms

The emissions units at the OL3 Plant are subject to site-wide applicable requirements as well as unit specific applicability and non-applicability determinations. The following forms are included in Appendix B and C detailing these requirements:

- Appendix B: OP-REQ1 (Application Area-Wide Applicability Determinations and General Information);
- Appendix C: OP-REQ2 (Negative Applicable Requirement Determinations); and
- Appendix C: OP-REQ3 (Applicable Requirements Summary)

Unit Attribute Forms

Appendix E includes the Unit Attribute (UA) Forms:

- OP-UA3 (Storage Tank Vessel Attributes);
- OP-UA6 (Boiler/Steam Generator/Steam Generating Unit Attributes);
- OP-UA7 (Flare Attributes);
- OP-UA12 (Fugitive Emission Attributes); and
- OP-UA15 (Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes)

APPENDIX A GENERAL AND ADMINISTRATIVE FORMS OP-CRO1, OP-1, OP-2, OP-SUMR, OP-PBRSUP, OP-ACPS

Form OP-CRO1
Certification by Responsible Official
Federal Operating Permit Program
Texas Commission on Environmental Quality

All initial issuance, revision, renewal, and reopening permit application submittals requiring certification must be addressed using this form. Updates to site operating permit (SOP) and temporary operating permit (TOP) applications, other than public notice verification materials, must be certified prior to authorization of public notice or start of public announcement. Updates to general operating permit (GOP) applications must be certified prior to receiving an authorization to operate under a GOP.

I. Identifying Information	
RN: RN100218973	
CN: CN600130017	
Account No.: CB0038Q	
Permit No.: O4165	
Project No.: TBA	
Area Name: Olefins 3 and Propane Dehydrogenation (PDH) Plant	
Company Name: Formosa Plastics Corporation, Texas	
II. Certification Type *(Please mark appropriate box)*	
☐ Responsible Official Representative	☒ Duly Authorized
III. Submittal Type *(Please mark appropriate box) (Only one response can be accepted per form)*	
☐ SOP/TOP Initial Permit Application	☒ Permit Revision, Renewal, or Reopening
☐ GOP Initial Permit Application	☐ Update to Permit Application
☐ Other: _____	

Form OP-CRO1
Certification by Responsible Official
Federal Operating Permit Program
Texas Commission on Environmental Quality

All initial issuance, revision, and renewal permit application submittals requiring certification must be accompanied by this form. Updates to acid rain or CSAPR (other than public notice verification materials) must be certified prior to authorization of public notice for the draft permit.

IV. Certification of Truth

This certification does not extend to information which is designated by TCEQ as information for reference only.

I, Mike Rivet certify that I am the DAR

(Certifier Name printed or typed) *(RO or DAR)*

and that, based on information and belief formed after reasonable inquiry, the statements and information dated during the time period or on the specific date(s) below, are true, accurate, and complete:
Note: Enter Either a Time Period or Specific Date(s) for each certification. This section must be completed. The certification is not valid without documentation date(s).

Time Period: From _____ to _____

(Start Date) *(End Date)*

Specific Dates: 02/03/2025 _____ _____ _____

(Date 1) *(Date 2)* *(Date 3)* *(Date 4)*

_____ _____

(Date 5) *(Date 6)*

Signature: (Signed in STEERS) Signature Date: _____

Title: Assistant Vice President/General Manager

Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 1)
Texas Commission on Environmental Quality

Please print or type all information. Direct any questions regarding this application form to the Air Permits Division at (512) 239-1250 or to the Texas Commission on Environmental Quality, Office of Air, Air-Permits Division (MC 163), P.O. Box 13087, Austin, Texas 78711-3087.

I.	**Company Identifying Information**
A.	Company Name: Formosa Plastics Corporation, Texas
B.	Customer Reference Number (CN): **CN600130017**
C.	Submittal Date *(mm/dd/yyyy)*: 02/03/2025
II.	**Site Information**
A.	Site Name: Olefins 3 (OL3) and Propane Dehydrogenation (PDH) Plant
B.	Regulated Entity Reference Number (RN): **RN100218973**
C.	Indicate affected state(s) required to review permit application: *(Check the appropriate box[es].)*
☐ AR ☐ CO ☐ KS ☐ LA ☐ NM ☐ OK ☒ N/A	
D.	Indicate all pollutants for which the site is a major source based on the site's potential to emit: *(Check the appropriate box[es].)*
☒ VOC ☒ NO_X ☒ SO_2 ☒ PM_{10} ☐ CO ☐ Pb ☒ HAPS	
Other:	
E.	Is the site a non-major source subject to the Federal Operating Permit Program? ☐ Yes ☒ No
F.	Is the site within a local program area jurisdiction? ☐ Yes ☒ No
G.	Will emissions averaging be used to comply with any Subpart of 40 CFR Part 63? ☐ Yes ☒ No
H.	Indicate the 40 CFR Part 63 Subpart(s) that will use emissions averaging:
III.	**Permit Type**
A.	Type of Permit Requested: *(Select only one response)*
☒ Site Operating Permit (SOP) ☐ Temporary Operating Permit (TOP) ☐ General Operating Permit (GOP)	

Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 2)
Texas Commission on Environmental Quality

IV.	**Initial Application Information** *(Complete for Initial Issuance Applications Only.)*	
A.	Is this submittal an abbreviated or a full application?	☐ Abbreviated ☐ Full
B.	If this is a full application, is the submittal a follow-up to an abbreviated application?	☐ Yes ☐ No
C.	If this is an abbreviated application, is this an early submittal for a combined SOP and Acid Rain permit?	☐ Yes ☐ No
D.	Has an electronic copy of this application been submitted (or is being submitted) to EPA? (Refer to the form instructions for additional information.)	☐ Yes ☐ No
E.	Has the required Public Involvement Plan been included with this application?	☐ Yes ☐ No
V.	**Confidential Information**	
A.	Is confidential information submitted in conjunction with this application?	☐ Yes ☒ No
VI.	**Responsible Official (RO) Identifying Information**	
RO Name Prefix: (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.)		
RO Full Name: Ken Mounger		
RO Title: Executive Vice President		
Employer Name: Formosa Plastics Corporation, Texas		
Mailing Address: 9 Peach Tree Hill Road		
City: Livingston		
State: New Jersey		
ZIP Code: 07039		
Territory:		
Country: USA		
Foreign Postal Code:		
Internal Mail Code:		
Telephone No.: (973) 716-7205		
Fax No.: (973) 994-8005		
Email: tlasater@ftpc.fpcusa.com		

Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 3)
Texas Commission on Environmental Quality

VII. Technical Contact Identifying Information *(Complete if different from RO.)*	
Technical Contact Name Prefix: (☐ Mr. ☐ Mrs. ☒ Ms. ☐ Dr.)	
Technical Contact Full Name: LeAnn Usoff	
Technical Contact Title: Assistant Manager of Air Permitting	
Employer Name: Formosa Plastics Corporation, Texas	
Mailing Address: P.O. Box 700	
City: Point Comfort	
State: Texas	
ZIP Code: 77978	
Territory:	
Country: USA	
Foreign Postal Code:	
Internal Mail Code:	
Telephone No.: (361) 920-9401	
Fax No.:	
Email: LeAnnU@ftpc.fpcusa.com	
VIII. Reference Only Requirements *(For reference only.)*	
A. State Senator: Lois W. Kolkhorst (District 18), Joan Huffman (District 17)	
B. State Representative: J.M. Lozano (District 43), Geanie W. Morrison (District 30)	
C. Has the applicant paid emissions fees for the most recent agency fiscal year (Sept. 1 - August 31)?	☒ Yes ☐ No ☐ N/A
D. Is the site subject to bilingual notice requirements pursuant to 30 TAC § 122.322?	☒ Yes ☐ No
E. Indicate the alternate language(s) in which public notice is required: Spanish	

Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 4)
Texas Commission on Environmental Quality

IX.	**Off-Site Permit Request** *(Optional for applicants requesting to hold the FOP and records at an off-site location.)*
A.	Office/Facility Name:
B.	Physical Address:
City:	
State:	
ZIP Code:	
Territory:	
Country:	
Foreign Postal Code:	
C.	Physical Location:
D.	Contact Name Prefix: (☐ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.)
Contact Full Name:	
E.	Telephone No.:
X.	**Application Area Information**
A.	Area Name: Olefins 3 and Propane Dehydrogenation (PDH) Plant
B.	Physical Address: 201 Formosa Drive
City: Point Comfort	
State: Texas	
ZIP Code: 77978	
C.	Physical Location:
D.	Nearest City: Point Comfort
E.	State: Texas
F.	ZIP Code: 77978

Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 5)
Texas Commission on Environmental Quality

X.	**Application Area Information *(continued)***
G.	Latitude (nearest second): 28° 41’ 20”
H.	Longitude (nearest second): -96° 32’50”
I.	Are there any emission units that were not in compliance with the applicable requirements identified in the application at the time of application submittal? ☐ Yes ☒ No
J.	Indicate the estimated number of emission units in the application area: 62
K.	Are there any emission units in the application area subject to the Acid Rain Program? ☐ Yes ☒ No
L.	Affected Source Plant Code (or ORIS/Facility Code):
XI.	**Public Notice** *(Complete this section for SOP Applications and Acid Rain Permit Applications only.)*
A.	Name of a public place to view application and draft permit: Calhoun County Public Library / Jackson County Memorial Library
B.	Physical Address: 200 W Mahan / 411 N. Wells Street
City: Port Lavaca / Edna	
ZIP Code: 77979 / 77957	
C.	Contact Person (Someone who will answer questions from the public during the public notice period):
Contact Name Prefix: (☐ Mr. ☐ Mrs. ☒ Ms. ☐ Dr.):	
Contact Person Full Name: LeAnn Usoff	
Contact Mailing Address: P.O. Box 700	
City: Point Comfort	
State: Texas	
ZIP Code: 77978	
Territory:	
Country: USA	
Foreign Postal Code:	
Internal Mail Code:	
Telephone No.: (361) 920-9401	

Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 6)
Texas Commission on Environmental Quality

XII. Delinquent Fees and Penalties
Notice: This form will not be processed until all delinquent fees and/or penalties owed to TCEQ or the Office of Attorney General on behalf of TCEQ are paid in accordance with the "Delinquent Fee and Penalty Protocol."
Complete Sections XIII and XIV for Acid Rain Permit and CSAPR applications only. Please include a copy of the Certificate of Representation submitted to EPA.
XIII. Designated Representative (DR) Identifying Information
DR Name Prefix: (☐ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.)
DR Full Name:
DR Title:
Employer Name:
Mailing Address:
City:
State:
ZIP Code:
Territory:
Country:
Foreign Postal Code:
Internal Mail Code:
Telephone No.:
Fax No.:
Email:

Complete Sections XIII and XIV for Acid Rain Permit and CSAPR applications only. Please include a copy of the Certificate of Representation submitted to EPA.
XIV. Alternate Designated Representative (ADR) Identifying Information
ADR Name Prefix: (☐ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.)
ADR Full Name:
ADR Title:
Employer Name:
Mailing Address:
City:
State:
ZIP Code:
Territory:
Country:
Foreign Postal Code:
Internal Mail Code:
Telephone No.:
Fax No.:
Email:

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 1
Texas Commission on Environmental Quality

Date: 02/03/2025	
Permit No.: O4165	
Regulated Entity No.: RN100218973	
Company Name: Formosa Plastics Corporation, Texas	
For Submissions to EPA	
Has an electronic copy of this application been submitted (or is being submitted) to EPA?	☒ YES ☐ NO
I. Application Type	
Indicate the type of application:	
☒ Renewal	
☐ Streamlined Revision (Must include provisional terms and conditions as explained in the instructions.)	
☒ Significant Revision	
☐ Revision Requesting Prior Approval	
☐ Administrative Revision	
☐ Response to Reopening	
II. Qualification Statement	
For SOP Revisions Only	☒ YES ☐ NO
For GOP Revisions Only	☐ YES ☐ NO

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 1 *(continued)*
Texas Commission on Environmental Quality

III. Major Source Pollutants (Complete this section if the permit revision is due to a change at the site or change in regulations.)						
Indicate all pollutants for which the site is a major source based on the site's potential to emit: *(Check the appropriate box[es].)*						
☒ VOC	☒ NO_X	☒ SO_2	☒ PM_{10}	☒ CO	☐ Pb	☒ HAP
Other: CO2e						
IV. Reference Only Requirements *(For reference only)*						
Has the applicant paid emissions fees for the most recent agency fiscal year (September 1 - August 31)?					☒ YES ☐ NO ☐ N/A	
V. Delinquent Fees and Penalties						
Notice: This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and penalty protocol.						

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 2
Texas Commission on Environmental Quality

Date: 02/03/2025
Permit No.: O4165
Regulated Entity No.: RN100218973
Company Name: Formosa Plastics Corporation, Texas

Using the table below, provide a description of the revision.

Revision No.	Revision Code	Unit/Group		Process	NSR Authorization	Description of Change and Provisional Terms and Conditions
		New Unit	ID No.	Applicable Form		
1	SIG-C	Yes	T-1152	OP-UA3, OP-REQ2	177140	Adding new source, EPN: T-1152
2	SIG-C	Yes	T-1253	OP-UA3, OP-REQ2	177140	Adding new source, EPN: T-1253
3	SIG-C	Yes	T-2451	OP-UA3, OP-REQ2	177140	Adding new source, EPN: T-2451
4	MS-A	No	GRP-ESAF (OL3-FLRA/B/C)	OP-UA7 OP-REQ3	107518	Add New Source Group Including Three Existing Elevated Steam Flares (OL3-FLRA/B/C) Located at the OL3 Process Units – Used to Incorporate New Post RTR EMACT Applicable Requirements
5	MS-A	Yes	OL3-MV	OP-REQ3	107518	Add New Source Used to Incorporate New EMACT Post RTR Maintenance Vent Requirements at OL3
6	MS-A	Yes	OL3-BL	OP-REQ3	107518	Add New Source Used to Incorporate New EMACT Post RTR Bypass Line Requirements at OL3

Revision No.	Revision Code	Unit/Group		Process	NSR Authorization	Description of Change and Provisional Terms and Conditions
		New Unit	ID No.	Applicable Form		
7	MS-A	Yes	OL3-SVD	OP-REQ3	107518	Add New Source Used to Incorporate New EMACT Post RTR Storage Vessel Degassing Requirements at OL3
8	MS-A	Yes	OL3-APRD	OP-REQ3	107518	Add New Source Used to Incorporate New EMACT Post RTR Atmospheric Pressure Relief Device (APRD) Requirements at OL3
9	MS-A	No	GRP-OL3DK (OL3-DK1, OL3-DK2)	OP-REQ3	176859, 107518	Add New Source Group Which Includes Two Existing OL3 Furnace Decoking Drums (OL3-DK1 & OL3-DK2) – Used to Incorporate New EMACT RTR Requirements for Ethylene Cracking Furnace Decoking Operations and Furnace Isolation Valve Inspections at OL3, Update authorization with PBR Registration
10	MS-A	No	OL3-CTWR	OP-REQ3	107518	Existing Source Used to Incorporate New EMACT Post RTR Heat Exchange System Requirements for OL3 heat exchangers in OHAP service (see 40 CFR 63 Subpart XX) at OL3
11	MS-A	Yes	OL3-EMPU	OP-REQ3	107518	Add New Source Used to Incorporate New EMACT Post RTR Startup, Shutdown, Malfunction and Maintenance Requirements in the OL3 EMPU and other miscellaneous EMPU-wide EMACT requirements at OL3
12	MS-A	No	OL3-VCU1	OP-PBRSUP	177140, 107518	Update authorization with PBR Registration
13	MS-A	No	OL3-VCU2	OP-PBRSUP	177140, 107518	Update authorization with PBR Registration

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 3
Texas Commission on Environmental Quality

Date: 02/03/2025		
Permit No.: O4165		
Regulated Entity No.: RN100218973		
Company Name: Formosa Plastics Corporation, Texas		
I.	**Significant Revision** *(Complete this section if you are submitting a significant revision application or a renewal application that includes a significant revision.)*	
A.	Is the site subject to bilingual requirements pursuant to 30 TAC § 122.322?	☒ YES ☐ NO
B.	Indicate the alternate language(s) in which public notice is required: Spanish	
C.	Will, there be a change in air pollutant emissions as a result of the significant revision?	☒ YES ☐ NO

Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2-Table 3
Texas Commission on Environmental Quality

Using the table below, indicate the air pollutant(s) that will be changing and include a brief description of the change in pollutant emissions for each pollutant:

Pollutant	Description of the Change in Pollutant Emissions
HAPs	Startup and shutdown annual frequency updates
VOC	The addition of three new storage totes (ID Nos. T-1152, T-1253, and T-2451)

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 1

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit/Process AI	Unit/Process Revision No.	Unit/Process ID No.	Unit/Process Applicable Form	Unit/Process Name/ Description	Unit/Process CAM	Preconstruction Authorizations 30 TAC Chapter 116/ 30 TAC Chapter 106	Preconstruction Authorizations Title I
A	1	T-1152	OP-UA3, OP-REQ2	EC3379A Tote		106.261/11/01/2003[177140] 106.262/11/01/2003[177140] 106.472/09/04/2000[177140]	
A	2	T-1253	OP-UA3, OP-REQ2	EC3443A Tote		106.261/11/01/2003[177140] 106.262/11/01/2003[177140] 106.472/09/04/2000[177140]	
A	3	T-2451	OP-UA3, OP-REQ2	EC3267A Tote		106.261/11/01/2003[177140] 106.262/11/01/2003[177140] 106.472/09/04/2000[177140]	
	4	GRP-ESAF (OL3-FLRA/B/C)	OP-UA7, OP-REQ3	Add New Source Group (See Table 2 Below) Which Includes Three Existing Elevated Steam Flares (OL3-FLRA, OL3-FLRB and OL3-FLRC) Located at the OL3 Process Units – Used to Incorporate New Post RTR EMACT Flare Applicable Requirements		107518	PSDTX1383M1 GHGPSDTX48

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 1

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit/Process AI	Unit/Process Revision No.	Unit/Process ID No.	Unit/Process Applicable Form	Unit/Process Name/ Description	Unit/Process CAM	Preconstruction Authorizations 30 TAC Chapter 116/ 30 TAC Chapter 106	Preconstruction Authorizations Title I
A	5	OL3-MV	OP-REQ3	Add New Source Used to Incorporate New EMACT Post RTR Maintenance Vent Requirements at OL3		107518	PSDTX1383M1 GHGPSDTX48
A	6	OL3-BL	OP-REQ3	Add New Source to Incorporate New EMACT Post RTR Bypass Line Requirements at OL3		107518	PSDTX1383M1 GHGPSDTX48
A	7	OL3-SVD	OP-REQ3	Add New Source to Incorporate New EMACT Post RTR Storage Vessel Degassing Requirements at OL3		107518	PSDTX1383M1 GHGPSDTX48
A	8	OL3-APRD	OP-REQ3	Add New Source Used to Incorporate New EMACT Post RTR Atmospheric Pressure Relief Device (APRD) Requirements at OL3		107518	PSDTX1383M1 GHGPSDTX48

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 1

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit/Process AI	Unit/Process Revision No.	Unit/Process ID No.	Unit/Process Applicable Form	Unit/Process Name/ Description	Unit/Process CAM	Preconstruction Authorizations 30 TAC Chapter 116/ 30 TAC Chapter 106	Preconstruction Authorizations Title I
	9	GRP-OL3DK (OL3-DK1, OL3-DK2)	OP-REQ3	Add New Source Group (See Table 2 Below) Which Includes Two Existing OL3 Furnace Decoking Drums (OL3-DK1 & OL3-DK2) to Incorporate New EMACT RTR Requirements for Ethylene Cracking Furnace Decoking Operations and Furnace Isolation Valve Inspections at OL3		107518 106.261/11/01/2003[176859] 106.262/11/01/2003[176859]	PSDTX1383M1 GHGPSDTX48
	10	OL3-CTWR	OP-REQ3	Utilize Existing Source to Incorporate New EMACT Post RTR Heat Exchange System Requirements for Heat Exchangers in OHAP Service (see 40 CFR 63 Subpart XX) at OL3		107518	PSDTX1383M1 GHGPSDTX48

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 1

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit/Process AI	Unit/Process Revision No.	Unit/Process ID No.	Unit/Process Applicable Form	Unit/Process Name/ Description	Unit/Process CAM	Preconstruction Authorizations 30 TAC Chapter 116/ 30 TAC Chapter 106	Preconstruction Authorizations Title I
A	11	OL3-EMPU	OP-REQ3	Add New Source to Incorporate New EMACT Post RTR Startup, Shutdown, Malfunction and Maintenance Requirements in the OL3 EMPU and Other Miscellaneous EMPU-wide EMACT Requirements at OL3		107518	PSDTX1383M1 GHGPSDTX48
	12	OL3-VCU1	OP-PBRSUP	Update authorization with PBR Registration		106.261/11/01/2003[177140] 106.262/11/01/2003[177140] 107518	PSDTX1383M1 GHGPSDTX48
	13	OL3-VCU	OP-PBRSUP	Update authorization with PBR Registration		106.261/11/01/2003[177140] 106.262/11/01/2003[177140] 107518	PSDTX1383M1 GHGPSDTX48

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 2

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Revision No.	ID No.	Applicable Form	Group AI	Group ID No.
4	OL3-FLRA/B/C	OP-UA7, OP-REQ3	A	GRP-ESAF (Elevated Steam Assisted Flares – 63YY-8)
9	OL3-DK1, OL3-DK2	OP-REQ3	A	GRP-OL3DK (Furnace Decoking and Valve Inspections– 63YY-13)

Form OP-PBRSUP
Permit By Rule Supplemental Table (Page 1)
Table A: Registered Permits by Rule (30 TAC Chapter 106) for the Application Area
Texas Commission on Environmental Quality

Date	Permit Number	Regulated Entity Number
02/03/2025	O4165	RN100218973

Unit ID No.	Registration No.	PBR No.	Registration Date
PIPELN-FUG	157260	106.261	07/11/2019
OL3-PLO	171046	106.261	12/20/2022
OL3-PRLO	171046	106.261	12/20/2022
OL3-BRLO	171046	106.261	12/20/2022
T-1152	177140	106.261,106.262, 106.472	09/13/2024
T-1253	177140	106.261, 106.262, 106.472	09/13/2024
T-2451	177140	106.261, 106.262, 106.472	09/13/2024
OL3-VCU1	177140	106.261, 106.262	09/13/2024
OL3-VCU2	177140	106.261, 106.262	09/13/2024
OL3-DK1	176859	106.261, 106.262	07/29/2024
OL3-DK2	176859	106.261, 106.262	07/29/2024

Form OP-PBRSUP
Permit By Rule Supplemental Table (Page 2)
Table B: Claimed (not registered) Permits by Rule (30 TAC Chapter 106) for the Application Area
Texas Commission on Environmental Quality

Date	Permit Number	Regulated Entity Number
02/03/2025	O4165	RN100218973

Unit ID No.	PBR No.	Version No./Date
METHANE-ISO	106.476	09/04/2000
OL3-MSS-ILE	106.263	11/01/2001
OL3-CTWR	106.371	09/04/2000

Form OP-PBRSUP
Permit By Rule Supplemental Table (Page 3)
Table C: Claimed (not registered) Permits by Rule (30 TAC Chapter 106) for Insignificant Sources for the Application Area
Texas Commission on Environmental Quality

Date	Permit Number	Regulated Entity Number
02/03/2025	O4165	RN100218973

PBR No.	Version No./Date
N/A	N/A

Form OP-PBRSUP
Permit By Rule Supplemental Table (Page 4)
Table D: Monitoring Requirements for registered and claimed PBRs for the Application Area
Texas Commission on Environmental Quality

Date	Permit Number	Regulated Entity Number
02/03/2025	O4165	RN100218973

Unit ID No.	PBR No.	Version No./Date Or Registration No.	Monitoring Requirement
PIPELN-FUG	106.261	157260	Maintain records on-site to demonstrate compliance with emission limits, such as monthly flowrate.
OL3-PLO	106.261	171046	Maintain records on-site to demonstrate compliance with emission limits, such as monthly throughput.
OL3-PRLO	106.261	171046	Maintain records on-site to demonstrate compliance with emission limits, such as monthly throughput.
OL3-BRLO	106.261	171046	Maintain records on-site to demonstrate compliance with emission limits, such as monthly throughput.
T-1152	106.261, 106.262	177140	Maintain records on-site to demonstrate compliance with emission limits, such as monthly throughput. Maintain records verifying the chemicals loaded, unloaded, or stored are limited to listed chemicals in the PBR.
T-1152	106.472	177140	Maintain records verifying the chemicals loaded, unloaded, or stored are limited to listed chemicals in the PBR.
T-1253	106.261, 106.262	177140	Maintain records on-site to demonstrate compliance with emission limits, such as monthly throughput. Maintain records verifying the chemicals loaded, unloaded, or stored are limited to listed chemicals in the PBR.
T-1253	106.472	177140	Maintain records verifying the chemicals loaded, unloaded, or stored are limited to listed chemicals in the PBR.

Form OP-PBRSUP
Permit By Rule Supplemental Table (Page 4)
Table D: Monitoring Requirements for registered and claimed PBRs for the Application Area
Texas Commission on Environmental Quality

Date	Permit Number	Regulated Entity Number
02/03/2025	O4165	RN100218973

Unit ID No.	PBR No.	Version No./Date Or Registration No.	Monitoring Requirement
T-2451	106.261, 106.262	177140	Maintain records on-site to demonstrate compliance with emission limits, such as monthly throughput. Maintain records verifying the chemicals loaded, unloaded, or stored are limited to listed chemicals in the PBR.
T-2451	106.472	177140	Maintain records verifying the chemicals loaded, unloaded, or stored are limited to listed chemicals in the PBR.
OL3-VCU1	106.261, 106.262	177140	Maintain records on-site to demonstrate compliance with emission limits, such as monthly flowrate, and verify that no visible emissions will result.
OL3-VCU2	106.261, 106.262	177140	Maintain records on-site to demonstrate compliance with emission limits, such as monthly flowrate, and verify that no visible emissions will result.
OL3-DK1	106.261, 106.262	176859	Maintain records on-site to demonstrate compliance with emission limits, such as number of decoking events.
OL3-DK2	106.261, 106.262	176859	Maintain records on-site to demonstrate compliance with emission limits, such as number of decoking events.
METHANE-ISO	106.476	09/04/2000	Ensure tank is equipped with relief valve that directs all vapors to the vapor combuster units.
OL3-MSS-ILE	106.263	11/01/2001	Maintain count of OL3 hydro-blasting activities to not more than 88 events per a rolling 12-month period.
OL3-CTWR	106.371	09/04/2000	Maintain records documenting that water has not been in direct contact with gaseous or liquid process streams containing carbon compounds, sulfur compounds, halogens or halogen compounds, cyanide compounds, inorganic acids, or acid gases.

Texas Commission on Environmental Quality
Form OP-ACPS
Application Compliance Plan and Schedule

Date: 02/03/2025	Regulated Entity No.: RN100218973	Permit No.: O4165
Company Name: Formosa Plastics Corporation, Texas		Area Name: Olefins 3 and Propane Dehydrogenation (PDH) Plant

- Part 1 of this form must be submitted with all initial FOP applications and renewal applications.
- The Responsible Official must use Form OP-CRO1 (Certification by Responsible Official) to certify information contained in this form in accordance with 30 TAC § 122.132(d)(8).

Part 1

A. Compliance Plan — Future Activity Committal Statement

The *Responsible Official* commits, utilizing reasonable effort, to the following:
As the responsible official it is my intent that all emission units shall continue to be in compliance with all applicable requirements they are currently in compliance with, and all emission units shall be in compliance by the compliance dates with any applicable requirements that become effective during the permit term.

B. Compliance Certification - Statement for Units in Compliance* (Indicate response by entering an "X" in the appropriate column)

1.	With the exception of those emission units listed in the Compliance Schedule section of this form (Part 2, below), and based, at minimum, on the compliance method specified in the associated applicable requirements, are all emission units addressed in this application in compliance with all their respective applicable requirements as identified in this application?	☒ YES ☐ NO
2.	Are there any non-compliance situations addressed in the Compliance Schedule Section of this form (Part 2)?	☐ YES ☒ NO
3.	If the response to Item B.2, above, is "Yes," indicate the total number of Part 2 attachments included in this submittal. *(For reference only)*	

* *For Site Operating Permits (SOPs), the complete application should be consulted for applicable requirements and their corresponding emission units when assessing compliance status.*
For General Operating Permits (GOPs), the application documentation, particularly Form OP-REQ1 should be consulted as well as the requirements contained in the appropriate General Permits portion of 30 TAC Chapter 122.

Compliance should be assessed based, at a minimum, on the required monitoring, testing, record keeping, and/or reporting requirements, as appropriate, associated with the applicable requirement in question.

APPENDIX B AREA-WIDE APPLICABLE REQUIREMENTS FORM OP-REQ1

Application Area-Wide Applicability Determinations and General Information
Form OP-REQ1 (Page 1)
Federal Operating Permit Program
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

For SOP applications, answer ALL questions unless otherwise directed.
♦ For GOP applications, answer ONLY these questions unless otherwise directed.

I.	**Title 30 TAC Chapter 111 - Control of Air Pollution from Visible Emissions and Particulate Matter**		
	A.	**Visible Emissions**	
♦	1.	The application area includes stationary vents constructed on or before January 31, 1972.	☐ Yes ☒ No
♦	2.	The application area includes stationary vents constructed after January 31, 1972. *If the responses to Questions I.A.1 and I.A.2 are both "No," go to Question I.A.6. If the response to Question I.A.1 is "No" and the response to Question I.A.2 is "Yes," go to Question I.A.4.*	☒ Yes ☐ No
♦	3.	The application area is opting to comply with the requirements for stationary vents constructed after January 31, 1972 for vents in the application area constructed on or before January 31, 1972.	☐ Yes ☐ No
♦	4.	All stationary vents are addressed on a unit specific basis.	☐ Yes ☒ No
♦	5.	Test Method 9 (40 CFR Part 60, Appendix A, Method 9 - Visual Determination of the Opacity of Emissions from Stationary Sources) is used to determine opacity of emissions in the application area.	☒ Yes ☐ No
♦	6.	The application area includes structures subject to 30 TAC § 111.111(a)(7)(A).	☐ Yes ☒ No
♦	7.	The application area includes sources, other than those specified in 30 TAC § 111.111(a)(1), (4), or (7), subject to 30 TAC § 111.111(a)(8)(A).	☐ Yes ☒ No
♦	8.	Emissions from units in the application area include contributions from uncombined water.	☐ Yes ☒ No
♦	9.	The application area is located in the City of El Paso, including Fort Bliss Military Reservation, and includes solid fuel heating devices subject to 30 TAC § 111.111(c).	☐ Yes ☒ No ☐ N/A

Application Area-Wide Applicability Determinations and General Information
Form OP-REQ1 (Page 2)
Federal Operating Permit Program
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

For SOP applications, answer ALL questions unless otherwise directed.
♦ For GOP applications, answer ONLY these questions unless otherwise directed.

I.	**Title 30 TAC Chapter 111 - Control of Air Pollution from Visible Emissions and Particulate Matter (continued)**			
	B.	**Materials Handling, Construction, Roads, Streets, Alleys, and Parking Lots**		
	1.	Items a - d determine applicability of any of these requirements based on geographical location.		
♦		a.	The application area is located within the city of El Paso.	☐ Yes ☒ No
♦		b.	The application area is located within the Fort Bliss Military Reservation, except areas specified in 30 TAC § 111.141.	☐ Yes ☒ No
♦		c.	The application area is located in the portion of Harris County inside the loop formed by Beltway 8.	☐ Yes ☒ No
♦		d.	The application area is located in the area of Nueces County outlined in Group II state implementation plan (SIP) for inhalable particulate matter adopted by the TCEQ on May 13, 1988.	☐ Yes ☒ No
		If there is any "Yes" response to Questions I.B.1.a - d, answer Questions I.B.2.a - d. If all responses to Questions I.B.1.a-d are "No," go to Section I.C.		
	2.	Items a - d determine the specific applicability of these requirements.		
♦		a.	The application area is subject to 30 TAC § 111.143.	☐ Yes ☐ No
♦		b.	The application area is subject to 30 TAC § 111.145.	☐ Yes ☐ No
♦		c.	The application area is subject to 30 TAC § 111.147.	☐ Yes ☐ No
♦		d.	The application area is subject to 30 TAC § 111.149.	☐ Yes ☐ No
	C.	**Emissions Limits on Nonagricultural Processes**		
♦	1.	The application area includes a nonagricultural process subject to 30 TAC § 111.151.		☒ Yes ☐ No
	2.	The application area includes a vent from a nonagricultural process that is subject to additional monitoring requirements. *If the response to Question I.C.2 is "No," go to Question I.C.4.*		☒ Yes ☐ No
	3.	All vents from nonagricultural process in the application area are subject to additional monitoring requirements.		☐ Yes ☒ No

Application Area-Wide Applicability Determinations and General Information
Form OP-REQ1 (Page 3)
Federal Operating Permit Program
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

For SOP applications, answer ALL questions unless otherwise directed.
♦ For GOP applications, answer ONLY these questions unless otherwise directed.

I.	**Title 30 TAC Chapter 111 - Control of Air Pollution from Visible Emissions and Particulate Matter (continued)**		
	C.	**Emissions Limits on Nonagricultural Processes (continued)**	
	4.	The application area includes oil or gas fuel-fired steam generators subject to 30 TAC §§ 111.153(a) and 111.153(c).	☐ Yes ☒ No
	5.	The application area includes oil or gas fuel-fired steam generators that are subject to additional monitoring requirements. *If the response to Question I.C.5 is "No," go to Question I.C.7.*	☐ Yes ☒ No
	6.	All oil or gas fuel-fired steam generators in the application area are subject to additional monitoring requirements.	☐ Yes ☐ No
	7.	The application area includes solid fossil fuel-fired steam generators subject to 30 TAC §§ 111.153(a) and 111.153(b).	☐ Yes ☒ No
	8.	The application area includes solid fossil fuel-fired steam generators that are subject to additional monitoring requirements. *If the response to Question I.C.8 is "No," go to Section I.D.*	☐ Yes ☒ No
	9.	All solid fossil fuel-fired steam generators in the application area are subject to additional monitoring requirements.	☐ Yes ☐ No
	D.	**Emissions Limits on Agricultural Processes**	
	1.	The application area includes agricultural processes subject to 30 TAC § 111.171.	☐ Yes ☒ No
	E.	**Outdoor Burning**	
♦	1.	Outdoor burning is conducted in the application area. *If the response to Question I.E.1 is "No," go to Section II.*	☐ Yes ☒ No
♦	2.	Fire training is conducted in the application area and subject to the exception provided in 30 TAC § 111.205.	☐ Yes ☐ No
♦	3.	Fires for recreation, ceremony, cooking, and warmth are used in the application area and subject to the exception provided in 30 TAC § 111.207.	☐ Yes ☐ No
♦	4.	Disposal fires are used in the application area and subject to the exception provided in 30 TAC § 111.209.	☐ Yes ☐ No

Application Area-Wide Applicability Determinations and General Information
Form OP-REQ1 (Page 4)
Federal Operating Permit Program
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

For SOP applications, answer ALL questions unless otherwise directed.
♦ For GOP applications, answer ONLY these questions unless otherwise directed.

I.	**Title 30 TAC Chapter 111 - Control of Air Pollution from Visible Emissions and Particulate Matter (continued)**		
	E.	**Outdoor Burning (continued)**	
♦	5.	Prescribed burning is used in the application area and subject to the exception provided in 30 TAC § 111.211.	☐ Yes ☐ No
♦	6.	Hydrocarbon burning is used in the application area and subject to the exception provided in 30 TAC § 111.213.	☐ Yes ☐ No
♦	7.	The application area has received the TCEQ Executive Director approval of otherwise prohibited outdoor burning according to 30 TAC § 111.215.	☐ Yes ☐ No
II.	**Title 30 TAC Chapter 112 - Control of Air Pollution from Sulfur Compounds**		
	A.	**Temporary Fuel Shortage Plan Requirements**	
	1.	The application area includes units that are potentially subject to the temporary fuel shortage plan requirements of 30 TAC §§ 112.15 - 112.18.	☐ Yes ☒ No
III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds**		
	A.	**Applicability**	
♦	1.	The application area is located in the Houston/Galveston/Brazoria area, Beaumont/Port Arthur area, Dallas/Fort Worth area, El Paso area, or a covered attainment county as defined by 30 TAC § 115.10. *See instructions for inclusive counties. If the response to Question III.A.1 is "No," go to Section IV.*	☒ Yes ☐ No
	B.	**Storage of Volatile Organic Compounds**	
♦	1.	The application area includes storage tanks, reservoirs, or other containers capable of maintaining working pressure sufficient at all times to prevent any VOC vapor or gas loss to the atmosphere.	☒ Yes ☐ No

Application Area-Wide Applicability Determinations and General Information
Form OP-REQ1 (Page 5)
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Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

For SOP applications, answer ALL questions unless otherwise directed.
♦ For GOP applications, answer ONLY these questions unless otherwise directed.

III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	C.	**Industrial Wastewater**	
	1.	The application area includes affected VOC wastewater streams of an affected source category, as defined in 30 TAC § 115.140. *If the response to Question III.C.1 is "No" or "N/A," go to Section III.D.*	☐ Yes ☐ No ☒ N/A
	2.	The application area is located at a petroleum refinery in the Beaumont/Port Arthur or Houston/Galveston/Brazoria area. *If the response to Question III.C.2 is "Yes" and the refinery is in the Beaumont/Port Arthur area, go to Section III.D.*	☐ Yes ☐ No
	3.	The application area is complying with the provisions of 40 CFR Part 63, Subpart G, as an alternative to complying with this division (relating to Industrial Wastewater). *If the response to Question III.C.3 is "Yes," go to Section III.D.*	☐ Yes ☐ No
	4.	The application area is located at a plant with an annual VOC loading in wastewater, as determined in accordance with 30 TAC § 115.148, less than or equal to 10 Mg (11.03 tons). *If the response to Question III.C.4 is "Yes," go to Section III.D.*	☐ Yes ☐ No
	5.	The application area includes wastewater drains, junction boxes, lift stations, or weirs that are subject to the control requirements of 30 TAC § 115.142(1).	☐ Yes ☐ No
	6.	The application area includes wastewater drains, junction boxes, lift stations, or weirs that handle streams chosen for exemption under 30 TAC § 115.147(2).	☐ Yes ☐ No
	7.	The application area includes wastewater drains, junction boxes, lift stations, or weirs that have an executive director approved exemption under 30 TAC § 115.147(4).	☐ Yes ☐ No
	D.	**Loading and Unloading of VOCs**	
♦	1.	The application area includes VOC loading operations.	☒ Yes ☐ No
♦	2.	The application area includes VOC transport vessel unloading operations. *For GOP applications, if the responses to Questions III.D.1 - D.2 are "No," go to Section III.E.*	☒ Yes ☐ No

Date	Permit No.	Regulated Entity No.
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For SOP applications, answer ALL questions unless otherwise directed.
♦ For GOP applications, answer ONLY these questions unless otherwise directed.

III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	D.	**Loading and Unloading of VOCs (continued)**	
♦	3.	Transfer operations at motor vehicle fuel dispensing facilities are the only VOC transfer operations conducted in the application area.	☐ Yes ☒ No
	E.	**Filling of Gasoline Storage Vessels (Stage I) for Motor Vehicle Fuel Dispensing Facilities**	
♦	1.	The application area includes one or more motor vehicle fuel dispensing facilities and gasoline is transferred from a tank-truck tank into a stationary storage container. *If the response to Question III.E.1 is "No," go to Section III.F.*	☐ YES ☒ No
♦	2.	Transfers to stationary storage containers used exclusively for the fueling of agricultural implements are the only transfer operations conducted at facilities in the application area.	☐ YES ☐ No
♦	3.	All transfers at facilities in the application area are made into stationary storage containers with internal floating roofs, external floating roofs, or their equivalent. *If the response to Question III.E.2 and/or E.3 is "Yes," go to Section III.F.*	☐ Yes ☐ No
♦	4.	The application area is located in a covered attainment county as defined in 30 TAC § 115.10. *If the response to Question III.E.4 is "No," go to Question III.E.9.*	☐ Yes ☐ No
♦	5.	Stationary gasoline storage containers with a nominal capacity less than or equal to 1,000 gallons are located at the facility.	☐ Yes ☐ No
♦	6.	Stationary gasoline storage containers with a nominal capacity greater than 1,000 gallons are located at the facility.	☐ Yes ☐ No
♦	7.	At facilities located in a covered attainment county other than Bastrop, Bexar, Caldwell, Comal, Guadalupe, Hays, Travis, Williamson, or Wilson County, transfers are made to stationary storage tanks greater than 1000 gallons located at a facility which has dispensed less than 100,000 gallons of gasoline in a calendar month after October 31, 2014. *If the response to Question III.E.7 is "Yes," go to Section III.F.*	☐ Yes ☐ No

Date	Permit No.	Regulated Entity No.
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For SOP applications, answer ALL questions unless otherwise directed.
♦ For GOP applications, answer ONLY these questions unless otherwise directed.

III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	E.	**Filling of Gasoline Storage Vessels (Stage I) for Motor Vehicle Fuel Dispensing Facilities (continued)**	
♦	8.	At facilities located in Bastrop, Bexar, Caldwell, Comal, Guadalupe, Hays, Travis, Williamson, or Wilson County, transfers are made to stationary storage tanks greater than 1000 gallons located at a facility which has dispensed no more than 25,000 gallons of gasoline in a calendar month after December 31, 2004. *If the response to Question III.E.8 is "Yes," go to Section III.F.*	☐ Yes ☐ No
♦	9.	Transfers are made to stationary storage tanks located at a motor vehicle fuel dispensing facility which has dispensed no more than 10,000 gallons of gasoline in any calendar month after January 1, 1991 and for which construction began prior to November 15, 1992.	☐ Yes ☐ No
♦	10.	Transfers are made to stationary storage tanks located at a motor vehicle fuel dispensing facility which has dispensed more than 10,000 gallons of gasoline in any calendar month after January 1, 1991 and for which construction began prior to November 15, 1992.	☐ Yes ☐ No
♦	11.	Transfers are made to stationary storage tanks located at a motor vehicle fuel dispensing facility which commenced construction on or after November 15, 1992.	☐ Yes ☐ No
♦	12.	At facilities located in Ellis, Johnson, Kaufman, Parker, or Rockwall County, transfers are made to stationary storage tanks located at a facility which has dispensed at least 10,000 gallons of gasoline but less than 125,000 gallons of gasoline in a calendar month after April 30, 2005.	☐ Yes ☐ No
	F.	**Control of VOC Leaks from Transport Vessels (Complete this section for GOP applications for GOPs 511, 512, 513 and 514 only)**	
♦	1.	Tank-truck tanks are filled with, or emptied of, gasoline at a facility that is subject to 30 TAC § 115.214(a)(1)(C) or 115.224(2) within the application area.	☐ Yes ☐ No ☐ N/A

Date	Permit No.	Regulated Entity No.
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For SOP applications, answer ALL questions unless otherwise directed.
♦ For GOP applications, answer ONLY these questions unless otherwise directed.

III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	F.	**Control of VOC Leaks from Transport Vessels (Complete this section for GOP applications for GOPs 511, 512, 513 and 514 only) (continued)**	
♦	2.	Tank-truck tanks are filled with non-gasoline VOCs having a TVP greater than or equal to 0.5 psia under actual storage conditions at a facility subject to 30 TAC § 115.214(a)(1)(C) within the application area.	☐ Yes ☐ No ☐ N/A
♦	3.	Tank-truck tanks are filled with, or emptied of, gasoline at a facility that is subject to 30 TAC § 115.214(b)(1)(C) or 115.224(2) within the application area.	☐ Yes ☐ No ☐ N/A
	G.	**Control of Vehicle Refueling Emissions (Stage II) at Motor Vehicle Fuel Dispensing Facilities**	
♦	1.	The application area includes one or more motor vehicle fuel dispensing facilities and gasoline is transferred from a stationary storage container into motor vehicle fuel tanks. *If the response to Question III.G.1 is "No" or "N/A," go to Section III.H.*	☐ Yes ☐ No ☒ N/A
♦	2.	The application area includes facilities that began construction on or after November 15, 1992 and prior to May 16, 2012.	☐ Yes ☐ No
♦	3.	The application area includes facilities that began construction prior to November 15, 1992. *If the responses to Questions III.G.2 and III.G.3 are both "No," go to Section III.H.*	☐ Yes ☐ No
♦	4.	The application area includes only facilities that have a monthly throughput of less than 10,000 gallons of gasoline.	☐ Yes ☐ No
♦	5.	The decommissioning of all Stage II vapor recovery control equipment located in the application area has been completed and the decommissioning notice submitted.	☐ Yes ☐ No ☐ N/A

Date	Permit No.	Regulated Entity No.
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For SOP applications, answer ALL questions unless otherwise directed.
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III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	H.	**Control of Reid Vapor Pressure (RVP) of Gasoline**	
♦	1.	The application area includes stationary tanks, reservoirs, or other containers holding gasoline that may ultimately be used in a motor vehicle in El Paso County. *If the response to Question III.H.1 is "No" or "N/A," go to Section III.I.*	☐ Yes ☐ No ☒ N/A
♦	2.	The application area includes stationary tanks, reservoirs, or other containers holding gasoline that will be used exclusively for the fueling of agricultural implements.	☐ Yes ☐ No
♦	3.	The application area includes a motor vehicle fuel dispensing facility.	☐ Yes ☐ No
♦	4.	The application area includes stationary tanks, reservoirs, or other containers holding gasoline and having a nominal capacity of 500 gallons or less.	☐ Yes ☐ No
	I.	**Process Unit Turnaround and Vacuum-Producing Systems in Petroleum Refineries**	
	1.	The application area is located at a petroleum refinery.	☐ Yes ☒ No
	J.	**Surface Coating Processes (Complete this section for GOP applications only.)**	
♦	1.	Surface coating operations (other than those performed on equipment located on-site and in-place) that meet the exemption specified in 30 TAC § 115.427(3)(A) or 115.427(7) are performed in the application area.	☐ Yes ☐ No ☐ N/A

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For SOP applications, answer ALL questions unless otherwise directed.
♦ For GOP applications, answer ONLY these questions unless otherwise directed.

III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	K.	**Cutback Asphalt**	
	1.	Conventional cutback asphalt containing VOC solvents for the paving of roadways, driveways, or parking lots, is used or specified for use in the application area by a state, municipal, or county agency. *If the response to Question III.K.1 is "N/A," go to Section III.L.*	☐ Yes ☐ No ☒ N/A
	2.	The use, application, sale, or offering for sale of conventional cutback asphalt containing VOC solvents for the paving of roadways, driveways, or parking lots occurs in the application area.	☐ Yes ☐ No ☐ N/A
	3.	Asphalt emulsion is used or produced within the application area.	☐ Yes ☐ No
	4.	The application area is using an alternate control requirement as specified in 30 TAC § 115.513. *If the response to Question III.K.4 is "No," go to Section III.L.*	☐ Yes ☐ No
	5.	The application area uses, applies, sells, or offers for sale asphalt concrete, made with cutback asphalt, that meets the exemption specified in 30 TAC § 115.517(1).	☐ Yes ☐ No
	6.	The application area uses, applies, sells, or offers for sale cutback asphalt that is used solely as a penetrating prime coat.	☐ Yes ☐ No
	7.	The applicant using cutback asphalt is a state, municipal, or county agency.	☐ Yes ☐ No
	L.	**Degassing of Storage Tanks, Transport Vessels and Marine Vessels**	
♦	1.	The application area includes degassing operations for stationary, marine, and/or transport vessels. *If the response to Question III.L.1 is "No" or "N/A," go to Section III.M.*	☐ Yes ☐ No ☒ N/A
♦	2.	Degassing of only ocean-going, self-propelled VOC marine vessels is performed in the application area. *If the response to Question III.L.2 is "Yes," go to Section III.M.*	☐ Yes ☐ No ☐ N/A

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III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	L.	**Degassing of Storage Tanks, Transport Vessels and Marine Vessels (continued)**	
♦	3.	Degassing of stationary VOC storage vessels with a nominal storage capacity of 1,000,000 gallons or more and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	☐ Yes ☐ No ☐ N/A
♦	4.	Degassing of stationary VOC storage vessels with a nominal storage capacity of 250,000 gallons or more, or a nominal storage capacity of 75,000 gallons and storing materials with a true vapor pressure greater than 2.6 psia, and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	☐ Yes ☐ No ☐ N/A
♦	5.	Degassing of VOC transport vessels with a nominal storage capacity of 8,000 gallons or more and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	☐ Yes ☐ No
♦	6.	Degassing of VOC marine vessels with a nominal storage capacity of 10,000 barrels (420,000 gallons) or more and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	☐ Yes ☐ No ☐ N/A
♦	7.	Degassing of VOC marine vessels with a nominal storage capacity of 10,000 barrels (420,000 gallons) and a vapor space partial pressure ≥ 0.5 psia that have sustained damage as specified in 30 TAC § 115.547(5) is performed in the application area.	☐ Yes ☐ No ☐ N/A
	M.	**Petroleum Dry Cleaning Systems**	
	1.	The application area contains one or more petroleum dry cleaning facilities that use petroleum-based solvents.	☐ Yes ☐ No ☒ N/A

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♦ For GOP applications, answer ONLY these questions unless otherwise directed.

III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	N.	**Vent Gas Control (Highly Reactive Volatile Organic Compounds (HRVOC)**	
	1.	The application area includes one or more vent gas streams containing HRVOC.	☐ Yes ☐ No ☒ N/A
	2.	The application area includes one or more flares that emit or have the potential to emit HRVOC. *If the responses to Questions III.N.1 and III.N.2 are both "No" or "N/A," go to Section III.O. If the response to Question III.N.1 is "Yes," continue with Question III.N.3.*	☐ Yes ☐ No ☒ N/A
	3.	All vent streams in the application area that are routed to a flare contain less than 5.0% HRVOC by weight at all times.	☐ Yes ☐ No
	4.	All vent streams in the application area that are not routed to a flare contain less than 100 ppmv HRVOC at all times. *If the responses to Questions III.N.3 and III.N.4 are both "Yes," go to Section III.O.*	☐ Yes ☐ No
	5.	The application area contains pressure relief valves that are not controlled by a flare.	☐ Yes ☐ No
	6.	The application area has at least one vent stream which has no potential to emit HRVOC.	☐ Yes ☐ No
	7.	The application area has vent streams from a source described in 30 TAC § 115.727(c)(3)(A) - (H).	☐ Yes ☐ No
	O.	**Cooling Tower Heat Exchange Systems (HRVOC)**	
	1.	The application area includes one or more cooling tower heat exchange systems that emit or have the potential to emit HRVOC.	☐ Yes ☐ No ☒ N/A

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IV.	**Title 30 TAC Chapter 117 - Control of Air Pollution from Nitrogen Compounds**		
	A.	**Applicability**	
♦	1.	The application area is located in the Houston/Galveston/Brazoria, Beaumont/Port Arthur, or Dallas/Fort Worth Eight-Hour area. *For SOP applications, if the response to Question IV.A.1 is "Yes," complete Sections IV.B - IV.F and IV.H.* *For GOP applications for GOPs 511, 512, 513, or 514, if the response to Question IV.A.1 is "Yes," go to Section IV.F.* *For GOP applications for GOP 517, if the response to Question IV.A.1 is "Yes," complete Sections IV.C and IV.F.* *For GOP applications, if the response to Question IV.A.1 is "No," go to Section VI.*	☐ Yes ☒ No
	2.	The application area is located in Bexar, Comal, Ellis, Hays, or McLennan County and includes a cement kiln. *If the response to Question IV.A.2 is "Yes," go to Question IV.H.1.*	☐ Yes ☒ No
	3.	The application area includes a utility electric generator in an east or central Texas county. *See instructions for a list of counties included.* *If the response to Question IV.A.3 is "Yes," go to Question IV.G.1.* *If the responses to Questions IV.A.1 - 3 are all "No," go to Question IV.H.1.*	☐ Yes ☒ No
	B.	**Utility Electric Generation in Ozone Nonattainment Areas**	
	1.	The application area includes units specified in 30 TAC §§ 117.1000, 117.1200, or 117.1300. *If the response to Question IV.B.1 is "No," go to Question IV.C.1.*	☐ Yes ☐ No
	2.	The application area is complying with a System Cap in 30 TAC §§ 117.1020 or 117.1220.	☐ Yes ☐ No

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IV.	**Title 30 TAC Chapter 117 - Control of Air Pollution from Nitrogen Compounds (continued)**		
	C.	**Commercial, Institutional, and Industrial Sources in Ozone Nonattainment Areas**	
♦	1.	The application area is located at a site subject to 30 TAC Chapter 117, Subchapter B and includes units specified in 30 TAC §§ 117.100, 117.300, or 117.400. *For SOP applications, if the response to Question IV.C.1 is "No," go to Question IV.D.1. For GOP applications for GOP 517, if the response to Question IV.C.1 is "No," go to Section IV.F.*	☐ Yes ☐ NO
♦	2.	The application area is located at a site that was a major source of NO_X before November 15, 1992.	☐ Yes ☐ No ☐ N/A
♦	3.	The application area includes an electric generating facility required to comply with the System Cap in 30 TAC § 117.320.	☐ Yes ☐ No
	D.	**Adipic Acid Manufacturing**	
	1.	The application area is located at, or part of, an adipic acid production unit.	☐ Yes ☐ No ☐ N/A
	E.	**Nitric Acid Manufacturing - Ozone Nonattainment Areas**	
	1.	The application area is located at, or part of, a nitric acid production unit.	☐ Yes ☐ No ☐ N/A
	F.	**Combustion Control at Minor Sources in Ozone Nonattainment Areas - Boilers, Process Heaters, Stationary Engines and Gas Turbines**	
♦	1.	The application area is located at a site that is a minor source of NO_X in the Houston/Galveston/Brazoria or Dallas/Fort Worth Eight-Hour areas (except for Wise County). *For SOP applications, if the response to Question IV.F.1 is "No," go to Question IV.G.1. For GOP applications, if the response to Question IV.F.1 is "No," go to Section VI.*	☐ Yes ☐ No
♦	2.	The application area is located in the Houston/Galveston/Brazoria area and has units that qualify for an exemption under 30 TAC § 117.2003(a).	☐ Yes ☐ No
♦	3.	The application area is located in the Houston/Galveston/Brazoria area and has units that qualify for an exemption under 30 TAC § 117.2003(b).	☐ Yes ☐ No

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IV.	**Title 30 TAC Chapter 117 - Control of Air Pollution from Nitrogen Compounds (continued)**		
	F.	**Combustion Control at Minor Sources in Ozone Nonattainment Areas - Boilers, Process Heaters, Stationary Engines and Gas Turbines (continued)**	
♦	4.	The application area is located in the Dallas/Fort Worth Eight-Hour area (except for Wise County) and has units that qualify for an exemption under 30 TAC § 117.2103.	☐ Yes ☐ No
♦	5.	The application area has units subject to the emission specifications under 30 TAC §§ 117.2010 or 30 TAC § 117.2110.	☐ Yes ☐ No
	6.	The application area has a unit that has been approved for alternative case specific specifications (ACSS) in 30 TAC § 117.2025 or 30 TAC § 117.2125. *If the response to Question IV.F.6 is "No," go to Section IV.G.*	☐ Yes ☐ No
	7.	An ACSS for carbon monoxide (CO) has been approved?	☐ Yes ☐ No
	8.	An ACSS for ammonia (NH_3) has been approved?	☐ Yes ☐ No
	9.	Provide the Permit Number(s) and authorization/issuance date(s) of the NSR project(s) that incorporates an ACSS below.	
	G.	**Utility Electric Generation in East and Central Texas**	
	1.	The application area includes utility electric power boilers and/or stationary gas turbines (including duct burners used in turbine exhaust ducts) that were placed into service before December 31, 1995. *If the response to Question IV.G.1 is "No," go to Question IV.H.1.*	☐ Yes ☐ No
	2.	The application area is complying with the System Cap in 30 TAC § 117.3020.	☐ Yes ☐ No
	H.	**Multi-Region Combustion Control - Water Heaters, Small Boilers, and Process Heaters**	
	1.	The application area includes a manufacturer, distributor, retailer or installer of natural gas fired water heaters, boilers or process heaters with a maximum rated capacity of 2.0 MMBtu/hr or less. *If the response to question IV.H.1 is "No," go to Section V.*	☐ Yes ☒ No
	2.	All water heaters, boilers or process heaters manufactured, distributed, retailed or installed qualify for an exemption under 30 TAC § 117.3203.	☐ Yes ☐ No

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V.	**Title 40 Code of Federal Regulations Part 59 (40 CFR Part 59) - National Volatile Organic Compound Emission Standards for Consumer and Commercial Products**	
	A. Subpart B - National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings	
1.	The application area manufactures automobile refinish coatings or coating components and sells or distributes these coatings or coating components in the United States.	☐ Yes ☒ No
2.	The application area imports automobile refinish coatings or coating components, manufactured on or after January 11, 1999, and sells or distributes these coatings or coating components in the United States. *If the responses to Questions V.A.1 and V.A.2 are both "No," go to Section V.B.*	☐ Yes ☒ No
3.	All automobile refinish coatings or coating components manufactured or imported by the application area meet one or more of the exemptions specified in 40 CFR § 59.100(c)(1) - (6).	☐ Yes ☐ No
	B. Subpart C - National Volatile Organic Compound Emission Standards for Consumer Products	
1.	The application area manufactures consumer products for sale or distribution in the United States.	☐ Yes ☒ No
2.	The application area imports consumer products manufactured on or after December 10, 1998 and sells or distributes these consumer products in the United States.	☐ Yes ☒ No
3.	The application area is a distributor of consumer products whose name appears on the label of one or more of the products. *If the responses to Questions V.B.1 - V.B.3 are all "No," go to Section V.C.*	☐ Yes ☒ No
4.	All consumer products manufactured, imported, or distributed by the application area meet one or more of the exemptions specified in 40 CFR § 59.201(c)(1) - (7).	☐ Yes ☐ No

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V.	**Title 40 Code of Federal Regulations Part 59 (40 CFR Part 59) - National Volatile Organic Compound Emission Standards for Consumer and Commercial Products (continued)**		
	C.	**Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings**	
	1.	The application area manufactures or imports architectural coatings for sale or distribution in the United States.	☐ Yes ☒ No
	2.	The application area manufactures or imports architectural coatings that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act. *If the responses to Questions V.C.1-2 are both "No," go to Section V.D.*	☐ Yes ☒ No
	3.	All architectural coatings manufactured or imported by the application area meet one or more of the exemptions specified in 40 CFR §59.400(c)(1)-(5).	☐ Yes ☐ No
	D.	**Subpart E - National Volatile Organic Compound Emission Standards for Aerosol Coatings**	
	1.	The application area manufactures or imports aerosol coating products for sale or distribution in the United States.	☐ Yes ☒ No
	2.	The application area is a distributor of aerosol coatings for resale or distribution in the United States.	☐ Yes ☒ No
	E.	**Subpart F - Control of Evaporative Emissions from New and In-Use Portable Fuel Containers**	
	1.	The application area manufactures or imports portable fuel containers for sale or distribution in the United States. *If the response to Question V.E.1 is "No," go to Section VI.*	☐ Yes ☒ No
	2.	All portable fuel containers manufactured or imported by the application area meet one or more of the exemptions specified in 40 CFR § 59.605(a) - (c).	☐ Yes ☐ No
VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards**		
	A.	**Applicability**	
♦	1.	The application area includes a unit(s) that is subject to one or more 40 CFR Part 60 subparts. *If the response to Question VI.A.1 is "No," go to Section VII.*	☒ Yes ☐ No

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	B.	**Subpart Y - Standards of Performance for Coal Preparation and Processing Plants**	
	1.	The application area is located at a coal preparation and processing plant. *If the response to Question VI.B.1 is "No," go to Section VI.C.*	☐ Yes ☒ No
	2.	The coal preparation and processing plant has a design capacity greater than 200 tons per day (tpd). *If the response to Question VI.B.2 is "No," go to Section VI.C.*	☐ Yes ☐ No
	3.	The plant has an option to enforceably limit its operating level to less than 200 tpd and is choosing this option. *If the response to Question VI.B.3 is "Yes," go to Section VI.C.*	☐ Yes ☐ No
	4.	The plant contains an open storage pile, as defined in § 60.251, as an affected facility. *If the response to Question VI.B.4 is "No," go to Section VI.C.*	☐ Yes ☐ No
	5.	The open storage pile was constructed, reconstructed or modified after May 27, 2009.	☐ Yes ☐ No
	C.	**Subpart GG - Standards of Performance for Stationary Gas Turbines (GOP applicants only)**	
♦	1.	The application area includes one or more stationary gas turbines that have a heat input at peak load greater than or equal to 10 MMBtu/hr (10.7GJ/hr), based on the lower heating value of the fuel fired. *If the response to Question VI.C.1 is "No" or "N/A," go to Section VI.E.*	☐ Yes ☐ No ☐ N/A
♦	2.	One or more of the affected facilities were constructed, modified, or reconstructed after October 3, 1977 and prior to February 19, 2005. *If the response to Question VI.C.2 is "No," go to Section VI.E.*	☐ Yes ☐ No
♦	3.	One or more stationary gas turbines in the application area are using a previously approved alternative fuel monitoring schedule as specified in 40 CFR § 60.334(h)(4).	☐ Yes ☐ No
♦	4.	The exemption specified in 40 CFR § 60.332(e) is being utilized for one or more stationary gas turbines in the application area.	☐ Yes ☐ No

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	C.	**Subpart GG - Standards of Performance for Stationary Gas Turbines (GOP applicants only) (continued)**	
♦	5.	One or more stationary gas turbines subject to 40 CFR Part 60, Subpart GG in the application area is injected with water or steam for the control of nitrogen oxides.	☐ Yes ☐ No
	D.	**Subpart XX - Standards of Performance for Bulk Gasoline Terminals**	
	1.	The application area includes bulk gasoline terminal loading racks. *If the response to Question VI.D.1 is "No," go to Section VI.E.*	☐ Yes ☒ No ☐ N/A
	2.	One or more of the loading racks were constructed or modified after December 17, 1980, and are not subject to 40 CFR Part 63, Subpart CC.	☐ Yes ☐ No
	E.	**Subpart LLL - Standards of Performance for Onshore Natural Gas Processing: Sulfur Dioxide (SO_2) Emissions**	
♦	1.	The application area includes affected facilities identified in 40 CFR § 60.640(a) that process natural gas (onshore). *For SOP applications, if the response to Question VI.E.1 is "No," go to Section VI.F. For GOP applications, if the response to Question VI.E.1 is or "N/A," go to Section VI.H.*	☐ Yes ☒ No
♦	2.	The affected facilities commenced construction or modification after January 20, 1984 and on or before August 23, 2011. *For SOP applications, if the response to Question VI.E.2 is "NO," go to Section VI.F. For GOP applications, if the response to Question VI.E.2 is "No," go to Section VI.H.*	☐ Yes ☐ No
♦	3.	The application area includes a gas sweetening unit with a design capacity greater than or equal to 2 long tons per day (LTPD) of hydrogen sulfide but operates at less than 2 LTPD. *For SOP applications, if the response to Question VI.E.3 is "No," go to Section VI.F. For GOP applications, if the response to Question VI.E.3 is "No," go to Section VI.H.*	☐ Yes ☐ No

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	E.	**Subpart LLL - Standards of Performance for Onshore Natural Gas Processing: Sulfur Dioxide (SO_2) Emissions (continued)**	
♦	4.	Federally enforceable operating limits have been established in the preconstruction authorization limiting the gas sweetening unit to less than 2 LTPD. *For SOP applications, if the response to Question VI.E.4. is "No," go to Section VI.F. For GOP applications, if the response to Question VI.E.4. is "No," go to Section VI.H.*	☐ Yes ☐ No
♦	5.	Please provide the Unit ID(s) for the gas sweetening unit(s) that have established federally enforceable operating limits in the space provided below	
	F.	**Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants**	
	1.	The application area includes affected facilities identified in 40 CFR § 60.670(a)(1) that are located at a fixed or portable nonmetallic mineral processing plant. *If the response to Question VI.F.1 is "No," go to Section VI.G.*	☐ Yes ☒ No
	2.	Affected facilities identified in 40 CFR § 60.670(a)(1) and located in the application area are subject to 40 CFR Part 60, Subpart OOO.	☐ Yes ☐ No
	G.	**Subpart QQQ - Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems**	
	1.	The application area is located at a petroleum refinery and includes one or more of the affected facilities identified in 40 CFR § 60.690(a)(2) - (4) for which construction, modification, or reconstruction was commenced after May 4, 1987. *If the response to Question VI.G.1 is "No," go to Section VI.H.*	☐ Yes ☒ No
	2.	The application area includes storm water sewer systems.	☐ Yes ☐ No

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	G.	**Subpart QQQ - Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems (continued)**	
	3.	The application area includes ancillary equipment which is physically separate from the wastewater system and does not come in contact with or store oily wastewater.	☐ Yes ☐ No
	4.	The application area includes non-contact cooling water systems.	☐ Yes ☐ No
	5.	The application area includes individual drain systems. *If the response to Question VI.G.5 is "No," go to Section VI.H.*	☐ Yes ☐ No
	6.	The application area includes one or more individual drain systems that meet the exemption specified in 40 CFR § 60.692-2(d).	☐ Yes ☐ No
	7.	The application area includes completely closed drain systems.	☐ Yes ☐ No
	H.	**Subpart AAAA - Standards of Performance for Small Municipal Waste Incineration Units for Which Construction Commenced After August 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 6, 2004**	
♦	1.	The application area includes at least one small municipal waste incineration unit, other than an air curtain incinerator. *If the response to Question VI.H.1. is "N/A," go to Section VI.I. If the response to Question VI.H.1 is "No," go to Question VI.H.4.*	☐ Yes ☒ No ☐ N/A
♦	2.	The application area includes at least one small municipal waste incineration unit, other than an air curtain incinerator, constructed after August 30, 1999 or modified or reconstructed on or after June 6, 2006.	☐ Yes ☐ No
♦	3.	The application area includes at least one small municipal waste incineration unit, other than an air curtain incinerator, constructed before August 30, 1999 and not modified or reconstructed on or after June 6, 2006.	☐ Yes ☐ No
♦	4.	The application area includes at least one air curtain incinerator. *If the response to Question VI.H.4 is "No," go to Section VI.I.*	☐ Yes ☒ No

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	H.	**Subpart AAAA - Standards of Performance for Small Municipal Waste Incineration Units for Which Construction Commenced After August 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 6, 2004 (continued)**	
♦	5.	The application area includes at least one air curtain incinerator constructed after August 30, 1999 or modified or reconstructed on or after June 6, 2006. *If the response to Question VI.H.5 is "No," go to Question VI.H.7.*	☐ Yes ☐ No
♦	6.	All air curtain incinerators constructed after August 30, 1999 or modified or reconstructed on or after June 6, 2006 combust only yard waste.	☐ Yes ☐ No
♦	7.	The application area includes at least one air curtain incinerator constructed before August 30, 1999 and not modified or reconstructed on or after June 6, 2006.	☐ Yes ☐ No
♦	8.	All air curtain incinerators constructed before August 30, 1999 and not modified or reconstructed on or after June 6, 2006 combust only yard waste.	☐ Yes ☐ No
	I.	**Subpart CCCC - Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for Which Construction Commenced After November 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 1, 2001**	
♦	1.	The application area includes at least one commercial or industrial solid waste incineration unit, other than an air curtain incinerator. *If the response to Question VI.I.1 is "N/A," go to Section VI.J. If the response to Question VI.I.1 is "No," go to Question VI.I.4.*	☐ Yes ☒ No ☐ N/A
♦	2.	The application area includes at least one commercial or industrial solid waste incineration unit, other than an air curtain incinerator, constructed after November 30, 1999 or modified or reconstructed on or after June 1, 2001.	☐ Yes ☐ No

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	I.	**Subpart CCCC - Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for Which Construction Commenced After November 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 1, 2001 (continued)**	
♦	3.	The application area includes at least one commercial or industrial solid waste incineration unit, other than an air curtain incinerator, constructed before November 30, 1999 and not modified or reconstructed on or after June 1, 2001.	☐ Yes ☐ No
♦	4.	The application area includes at least one air curtain incinerator. *If the response to Question VI.I.4 is "No," go to Section VI.J.*	☐ Yes ☒ No
♦	5.	The application area includes at least one air curtain incinerator, constructed after November 30, 1999 or modified or reconstructed on or after June 1, 2001. *If the response to Question VI.I.5 is "No," go to VI.I.7.*	☐ Yes ☐ No
♦	6.	All air curtain incinerators constructed after November 30, 1999 or modified or reconstructed on or after June 1, 2001 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ Yes ☐ No
♦	7.	The application area includes at least one air curtain incinerator, constructed before November 30, 1999 and not modified or reconstructed on or after June 1, 2001.	☐ Yes ☐ No
♦	8.	All air curtain incinerators constructed before November 30, 1999 and not modified or reconstructed on or after June 1, 2001 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ Yes ☐ No

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	J.	**Subpart EEEE - Standards of Performance for Other Solid Waste Incineration Units for Which Construction Commenced After December 9, 2004 or for Which Modification or Reconstruction Commenced on or After June 16, 2006**	
♦	1.	The application area includes at least one very small municipal waste incineration unit or institutional incineration unit, other than an air curtain incinerator. *If the response to Question VI.J.1 is "N/A," go to Section VI.K. If the response to Question VI.J.1 is "No," go to Question VI.J.4.*	☐ Yes ☒ No ☐ N/A
♦	2.	The application area includes at least one very small municipal waste incineration unit, other than an air curtain incinerator, constructed after December 9, 2004 or modified or reconstructed on or after June 16, 2006.	☐ Yes ☐ No
♦	3.	The application area includes at least one very small municipal waste incineration unit, other than an air curtain incinerator, constructed before December 9, 2004 and not modified or reconstructed on or after June 16, 2006.	☐ Yes ☐ No
♦	4.	The application area includes at least one air curtain incinerator. *If the response to Question VI.J.4 is "No," go to Section VI.K.*	☐ Yes ☒ No
♦	5.	The application area includes at least one air curtain incinerator constructed after December 9, 2004 or modified or reconstructed on or after June 16, 2006. *If the response to Question VI.J.5 is "No," go to Question VI.J.7.*	☐ Yes ☐ No
♦	6.	All air curtain incinerators constructed after December 9, 2004 or modified or reconstructed on or after June 16, 2006 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ Yes ☐ No
♦	7.	The application area includes at least one air curtain incinerator constructed before December 9, 2004 and not modified or reconstructed on or after June 16, 2006.	☐ Yes ☐ No

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (NSPS) (continued)**		
	J.	**Subpart EEEE - Standards of Performance for Other Solid Waste Incineration Units for Which Construction Commenced After December 9, 2004 or for Which Modification or Reconstruction Commenced on or After June 16, 2006 (continued)**	
♦	8.	All air curtain incinerators constructed before December 9, 2004 and not modified or reconstructed on or after June 16, 2006 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ Yes ☐ No
♦	9.	The air curtain incinerator is located at an institutional facility and is a distinct operating unit of the institutional facility that generated the waste.	☐ Yes ☐ No
♦	10.	The air curtain incinerator burns less than 35 tons per day of wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ Yes ☐ No
	K.	**Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution**	
♦	1.	The application area includes one or more of the onshore affected facilities listed in 40 CFR § 60.5365(a)-(g) that are subject to 40 CFR Part 60, Subpart OOOO.	☐ Yes ☒ No
VII.	**Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants**		
	A.	**Applicability**	
♦	1.	The application area includes a unit(s) that is subject to one or more 40 CFR Part 61 subparts. *If the response to Question VII.A.1 is "No" or "N/A," go to Section VIII.*	☒ Yes ☐ No ☐ N/A
	B.	**Subpart F - National Emission Standard for Vinyl Chloride**	
	1.	The application area is located at a plant which produces ethylene dichloride by reaction of oxygen and hydrogen chloride with ethylene, vinyl chloride by any process, and/or one or more polymers containing any fraction of polymerized vinyl chloride.	☐ Yes ☒ No
	C.	**Subpart J - National Emission Standard for Benzene Emissions for Equipment Leaks (Fugitive Emission Sources) of Benzene (Complete this section for GOP applications only)**	
♦	1.	The application area includes equipment in benzene service.	☐ Yes ☐ No ☐ N/A

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VII.	**Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)**	
D.	**Subpart L - National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants**	
1.	The application area is located at a coke by-product recovery plant and includes one or more of the affected sources identified in 40 CFR § 61.130(a) - (b). *If the response to Question VII.D.1 is "No," go to Section VII.E.*	☐ Yes ☒ No
2.	The application area includes equipment in benzene service as determined by 40 CFR § 61.137(b).	☐ Yes ☐ No
3.	The application area has elected to comply with the provisions of 40 CFR § 61.243-1 and 40 CFR § 61.243-2.	☐ Yes ☐ No
E.	**Subpart M - National Emission Standard for Asbestos**	
	Applicability	
1.	The application area includes sources, operations, or activities specified in 40 CFR §§ 61.143, 61.144, 61.146, 61.147, 61.148, or 61.155. *If the response to Question VII.E.1 is "No," go to Section VII.F.*	☐ Yes ☒ No
	Roadway Construction	
2.	The application area includes roadways constructed or maintained with asbestos tailings or asbestos-containing waste material.	☐ Yes ☐ No
	Manufacturing Commercial Asbestos	
3.	The application area includes a manufacturing operation using commercial asbestos. *If the response to Question VII.E.3 is "No," go to Question VII.E.4.*	☐ Yes ☐ No
	a. Visible emissions are discharged to outside air from the manufacturing operation	☐ Yes ☐ No
	b. An alternative emission control and waste treatment method is being used that has received prior U.S. Environmental Protection Agency (EPA) approval.	☐ Yes ☐ No

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VII.	**Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)**	
E.	**Subpart M - National Emission Standard for Asbestos (continued)**	
	***Manufacturing Commercial Asbestos* (continued)**	
	c. Asbestos-containing waste material is processed into non-friable forms.	☐ Yes ☐ No
	d. Asbestos-containing waste material is adequately wetted.	☐ Yes ☐ No
	e. Alternative filtering equipment is being used that has received EPA approval.	☐ Yes ☐ No
	f. A high efficiency particulate air (HEPA) filter is being used that is certified to be at least 99.97% efficient for 0.3-micron particles	☐ Yes ☐ No
	g. The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals.	☐ Yes ☐ No
	Asbestos Spray Application	
4.	The application area includes operations in which asbestos-containing materials are spray applied. *If the response to Question VII.E.4 is "No," go to Question VII.E.5.*	☐ Yes ☐ No
	a. Asbestos fibers are encapsulated with a bituminous or resinous binder during spraying and are not friable after drying. *If the response to Question VII.E.4.a is "Yes," go to Question VII.E.5.*	☐ Yes ☐ No
	b. Spray-on applications on buildings, structures, pipes, and conduits do not use material containing more than 1% asbestos.	☐ Yes ☐ No
	c. An alternative emission control and waste treatment method is being used that has received prior EPA approval.	☐ Yes ☐ No

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VII.	**Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)**		
	E.	**Subpart M - National Emission Standard for Asbestos (continued)**	
		Asbestos Spray Application **(continued)**	
	d.	Asbestos-containing waste material is processed into non-friable forms.	☐ Yes ☐ No
	e.	Asbestos-containing waste material is adequately wetted.	☐ Yes ☐ No
	f.	Alternative filtering equipment is being used that has received EPA approval.	☐ Yes ☐ No
	g.	A HEPA filter is being used that is certified to be at least 99.97% efficient for 0.3-micron particles.	☐ Yes ☐ No
	h.	The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals.	☐ Yes ☐ No
		Fabricating Commercial Asbestos	
5.		The application area includes a fabricating operation using commercial asbestos. *If the response to Question VII.E.5 is "No," go to Question VII.E.6.*	☐ Yes ☐ No
	a.	Visible emissions are discharged to outside air from the manufacturing operation.	☐ Yes ☐ No
	b.	An alternative emission control and waste treatment method is being used that has received prior EPA approval.	☐ Yes ☐ No
	c.	Asbestos-containing waste material is processed into non-friable forms.	☐ Yes ☐ No
	d.	Asbestos-containing waste material is adequately wetted.	☐ Yes ☐ No
	e.	Alternative filtering equipment is being used that has received EPA approval.	☐ Yes ☐ No

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VII.	**Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)**	
E.	**Subpart M - National Emission Standard for Asbestos (continued)**	
	***Fabricating Commercial Asbestos* (continued)**	
f.	A HEPA filter is being used that is certified to be at least 99.97% efficient for 0.3-micron particles.	☐ Yes ☐ No
g.	The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals.	☐ Yes ☐ No
	Non-sprayed Asbestos Insulation	
6.	The application area includes insulating materials (other than spray applied insulating materials) that are either molded and friable or wet-applied and friable after drying.	☐ Yes ☐ No
	Asbestos Conversion	
7.	The application area includes operations that convert regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material.	☐ Yes ☐ No
F.	**Subpart P - National Emission Standard for Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities**	
1.	The application area is located at a metallic arsenic production plant or at an arsenic trioxide plant that processes low-grade arsenic bearing materials by a roasting condensation process.	☐ Yes ☒ No
G.	**Subpart BB - National Emission Standard for Benzene Emissions from Benzene Transfer Operations**	
1.	The application area is located at a benzene production facility and/or bulk terminal. *If the response to Question VII.G.1 is "No," go to Section VII.H.*	☐ Yes ☒ No
2.	The application area includes benzene transfer operations at marine vessel loading racks.	☐ Yes ☐ No

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VII.	**Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)**	
G.	**Subpart BB - National Emission Standard for Benzene Emissions from Benzene Transfer Operations (continued)**	
3.	The application area includes benzene transfer operations at railcar loading racks.	☐ Yes ☐ No
4.	The application area includes benzene transfer operations at tank-truck loading racks.	☐ Yes ☐ No
H.	**Subpart FF - National Emission Standard for Benzene Waste Operations**	
	Applicability	
1.	The application area includes a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery facility as defined in § 61.341.	☒ Yes ☐ No
2.	The application area is located at a hazardous waste treatment, storage, and disposal (TSD) facility site as described in 40 CFR § 61.340(b). *If the responses to Questions VII.H.1 and VII.H.2 are both "No," go to Section VIII.*	☐ Yes ☒ No
3.	The application area is located at a site that has no benzene onsite in wastes, products, byproducts, or intermediates. *If the response to Question VII.H.3 is "Yes," go to Section VIII.*	☐ Yes ☒ No
4.	The application area is located at a site having a total annual benzene quantity from facility waste less than 1 megagram per year (Mg/yr). *If the response to Question VII.H.4 is "Yes," go to Section VIII*	☐ Yes ☒ No
5.	The application area is located at a site having a total annual benzene quantity from facility waste greater than or equal to 1 Mg/yr but less than 10 Mg/yr. *If the response to Question VII.H.5 is "Yes," go to Section VIII.*	☐ Yes ☒ No

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VII.	**Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)**	
	H. Subpart FF - National Emission Standard for Benzene Waste Operations (continued)	
	***Applicability* (continued)**	
6.	The flow-weighted annual average benzene concentration of each waste stream at the site is based on documentation.	☒ Yes ☐ No
7.	The application area has waste streams with flow-weighted annual average water content of 10% or greater.	☒ Yes ☐ No
	Waste Stream Exemptions	
8.	The application area has waste streams that meet the exemption specified in 40 CFR § 61.342(c)(2) (the flow-weighted annual average benzene concentration is less than 10 ppmw).	☒ Yes ☐ No
9.	The application area has waste streams that meet the exemption specified in 40 CFR § 61.342(c)(3) because process wastewater has a flow rate less than 0.02 liters per minute or an annual wastewater quantity less than 10 Mg/yr.	☒ Yes ☐ No
10.	The application area has waste streams that meet the exemption specified in 40 CFR § 61.342(c)(3) because the total annual benzene quantity is less than or equal to 2 Mg/yr.	☒ Yes ☐ No
11.	The application area transfers waste off-site for treatment by another facility.	☒ Yes ☐ No
12.	The application area is complying with 40 CFR § 61.342(d).	☐ Yes ☒ No
13.	The application area is complying with 40 CFR § 61.342(e). *If the response to Question VII.H.13 is "No," go to Question VII.H.15.*	☐ Yes ☒ No
14.	The application area has facility waste with a flow weighted annual average water content of less than 10%.	☐ Yes ☐ No

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VII.	**Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)**	
	H. Subpart FF - National Emission Standard for Benzene Waste Operations (continued)	
	Container Requirements	
15.	The application area has containers, as defined in 40 CFR § 61.341, that receive non-exempt benzene waste. *If the response to Question VII.H.15 is "No," go to Question VII.H.18.*	☒ Yes ☐ No
16.	The application area is an alternate means of compliance to meet the 40 CFR § 61.345 requirements for containers. *If the response to Question VII.H.16 is "Yes," go to Question VII.H.18.*	☐ Yes ☒ No
17.	Covers and closed-vent systems used for containers operate such that the container is maintained at a pressure less than atmospheric pressure.	☐ Yes ☒ No
	Individual Drain Systems	
18.	The application area has individual drain systems, as defined in 40 CFR § 61.341, that receive or manage non-exempt benzene waste. *If the response to Question VII.H.18 is "No," go to Question VII.H.25.*	☒ Yes ☐ No
19.	The application area is using an alternate means of compliance to meet the 40 CFR § 61.346 requirements for individual drain systems. *If the response to Question VII.H.19 is "Yes," go to Question VII.H.25.*	☐ Yes ☒ No
20.	The application area has individual drain systems complying with 40 CFR § 61.346(a). *If the response to Question VII.H.20 is "No," go to Question VII.H.22.*	☒ Yes ☐ No
21.	Covers and closed-vent systems used for individual drain systems operate such that the individual drain system is maintained at a pressure less than atmospheric pressure.	☐ Yes ☒ No

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VII.	**Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)**		
	H.	**Subpart FF - National Emission Standard for Benzene Waste Operations (continued)**	
		***Individual Drain Systems* (continued)**	
	22.	The application area has individual drain systems complying with 40 CFR § 61.346(b). *If the response to Question VII.H.22 is "No," go to Question VII.H.25.*	☒ Yes ☐ No
	23.	Junction boxes in the individual drain systems are equipped with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation.	☒ Yes ☐ No
	24.	Junction box vent pipes in the individual drain systems are connected to a closed-vent system and control device.	☒ Yes ☐ No
		Remediation Activities	
	25.	Remediation activities take place at the application area subject to 40 CFR Part 61, Subpart FF.	☐ Yes ☒ No
VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories**		
	A.	**Applicability**	
♦	1.	The application area includes a unit(s) that is subject to one or more 40 CFR Part 63 subparts other than subparts made applicable by reference under subparts in 40 CFR Part 60, 61 or 63. *See instructions for 40 CFR Part 63 subparts made applicable only by reference.*	☒ Yes ☐ No
	B.	**Subpart F - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry**	
	1.	The application area is located at a plant site that is a major source as defined in the Federal Clean Air Act § 112(a). *If the response to Question VIII.B.1 is "No," go to Section VIII.D.*	☒ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
B.	**Subpart F - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (continued)**	
2.	The application area is located at a site that includes at least one chemical manufacturing process unit, as defined in 40 CFR § 63.101, that manufactures as a primary product one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or (b)(1)(ii). *If the response to Question VIII.B.2 is "No," go to Section VIII.D.*	☒ Yes ☐ No
3.	The application area is located at a site that includes at least one chemical manufacturing process unit, as defined in 40 CFR § 63.101, that manufactures as a primary product one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or (b)(1)(ii) and uses as a reactant or manufactures as a product, or co-product, one or more of the organic hazardous air pollutants listed in table 2 of 40 CFR Part 63, Subpart F.	☒ Yes ☐ No
4.	The application area includes a chemical manufacturing process unit, as defined in 40 CFR § 63.101, that manufactures as a primary product one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or (b)(1)(ii) and uses as a reactant or manufactures as a product, or co-product, one or more of the organic hazardous air pollutants listed in table 2 of 40 CFR Part 63, Subpart F.	☐ Yes ☒ No
5.	The application area includes a chemical manufacturing process unit, as defined in 40 CFR § 63.101, that manufactures as a primary product one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or (b)(1)(ii) and does not use as a reactant or manufacture as a product, or co-product, one or more of the organic hazardous air pollutants listed in table 2 of 40 CFR Part 63, Subpart F. *If the response to Questions VIII.B.3, B.4 and B.5 are all "No," go to Section VIII.D.*	☐ Yes ☒ No

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
C.	**Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater**	
	Applicability	
1.	The application area is located at a site that is subject to 40 CFR 63, Subpart F and the application area includes process vents, storage vessels, transfer racks, or waste streams associated with a chemical manufacturing process subject to 40 CFR 63, Subpart F. *If the response to Question VIII.C.1 is "No," go to Section VIII.D.*	☐ Yes ☒ No
2.	The application area includes fixed roofs, covers, and/or enclosures that are required to comply with 40 CFR § 63.148.	☐ Yes ☐ No
3.	The application area includes vapor collection systems or closed-vent systems that are required to comply with 40 CFR § 63.148. *If the response to Question VIII.C.3 is "No," go to Question VIII.C.8.*	☐ Yes ☐ No
4.	The application area includes vapor collection systems or closed-vent systems that are constructed of hard piping.	☐ Yes ☐ No
5.	The application area includes vapor collection systems or closed-vent systems that contain bypass lines that could divert a vent stream away from a control device and to the atmosphere. *If the response to Question VIII.C.5 is "No," go to Question VIII.C.8.*	☐ Yes ☐ No
	Vapor Collection and Closed Vent Systems	
6.	Flow indicators are installed, calibrated, maintained, and operated at the entrances to bypass lines in the application area.	☐ Yes ☐ No
7.	Bypass lines in the application area are secured in the closed position with a car-seal or a lock-and-key type configuration.	☐ Yes ☐ No

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)		
	Reloading or Cleaning of Railcars, Tank Trucks, or Barges	
8.	The application area includes reloading and/or cleaning of railcars, tank trucks, or barges that deliver HAPs to a storage tank. *If the response to Question VIII.C.8 is "No," go to Question VIII.C.11.*	☐ Yes ☐ No
9.	The application area includes operations that are complying with § 63.119(g)(6) through the use of a closed-vent system with a control device used to reduce inlet emissions of HAPs by at least 95 percent by weight or greater.	☐ Yes ☐ No
10.	The application area includes operations that are complying with § 63.119(g)(6) through the use of a vapor balancing system.	☐ Yes ☐ No
	Transfer Racks	
11.	The application area includes Group 1 transfer racks that load organic HAPs.	☐ Yes ☐ No
	Process Wastewater Streams	
12.	The application area includes process wastewater streams. *If the response to Question VIII.C.12 is "No," go to Question VIII.C.34.*	☐ Yes ☐ No
13.	The application area includes process wastewater streams that are also subject to the provisions of 40 CFR Part 61, Subpart FF. *If the response to Question VIII.C.13 is "No," go to Question VIII.C.15.*	☐ Yes ☐ No
14.	The application area includes process wastewater streams that are complying with 40 CFR §§ 63.110(e)(1)(i) and (e)(1)(ii).	☐ Yes ☐ No
15.	The application area includes process wastewater streams that are also subject to the provisions of 40 CFR Part 61, Subpart F. *If the response to Question VIII.C.15 is "No," go to Question VIII.C.17.*	☐ Yes ☐ No

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)		
	***Process Wastewater Streams* (continued)**	
16.	The application area includes process wastewater streams utilizing the compliance option specified in 40 CFR § 63.110(f)(4)(ii).	☐ Yes ☐ No
17.	The application area includes process wastewater streams that are also subject to the provisions of 40 CFR Parts 260 through 272. *If the response to Question VIII.C.17 is "No," go to Question VIII.C.20.*	☐ Yes ☐ No
18.	The application area includes process wastewater streams complying with 40 CFR § 63.110(e)(2)(i).	☐ Yes ☐ No
19.	The application are includes process wastewater streams complying with 40 CFR § 63.110(e)(2)(ii).	☐ Yes ☐ No
20.	The application area includes process wastewater streams, located at existing sources, that are designated as Group 1; are required to be treated as Group 1 under 40 CFR § 63.110; or are determined to be Group 1 for Table 9 compounds.	☐ Yes ☐ No
21.	The application area includes process wastewater streams, located at existing sources that are Group 2.	☐ Yes ☐ No
22.	The application area includes process wastewater streams, located at new sources, that are designated as Group 1; required to be treated as Group 1 under 40 CFR § 63.110; or are determined to be Group 1 for Table 8 or Table 9 compounds.	☐ Yes ☐ No
23.	The application area includes process wastewater streams, located at new sources that are Group 2 for both Table 8 and Table 9 compounds.	☐ Yes ☐ No

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)		
	***Process Wastewater Streams* (continued)**	
24.	All Group 1 wastewater streams at the site are demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.C.24 is "Yes," go to Question VIII.C.34.*	☐ Yes ☐ No
25.	The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.C.25 is "No," go to Question VIII.C.27.*	☐ Yes ☐ No
26.	The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	☐ Yes ☐ No
27.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	☐ Yes ☐ No
28.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. *If the responses to Questions VIII.C.27 - VIII.C.28 are both "No," go to Question VIII.C.30.*	☐ Yes ☐ No
29.	The application area includes waste management units that receive or manage a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	☐ Yes ☐ No
30.	The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
C.	**Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)**	
	Drains	
31.	The application area includes individual drain systems that receive or manage a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream. *If the response to Question VIII.C.31 is "No," go to Question VIII.C.34.*	☐ Yes ☐ No
32.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices.	☐ Yes ☐ No
33.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	☐ Yes ☐ No
34.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of a chemical manufacturing process unit that meets the criteria of 40 CFR § 63.100(b). *If the response to Question VIII.C.34 is "No," go to Question VIII.C.39.*	☐ Yes ☐ No
35.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes (that are part of a chemical manufacturing process unit) that meet the criteria listed in 40 CFR § 63.149(d). *If the response to Question VIII.C.35 is "No," go to Question VIII.C.39.*	☐ Yes ☐ No
36.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds listed in 40 CFR Part 63 Subpart G, Table 9, at any flow rate.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
C.	**Subpart G-National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operation, and Wastewater (continued)**	
	***Drains* (continued)**	
37.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds listed in 40 CFR Part 63 Subpart G, Table 9, at an annual average flow rate greater than or equal to 10 liters per minute.	☐ Yes ☐ No
38.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of a chemical manufacturing process unit that is subject to the new source requirements of 40 CFR § 63.100(l)(1) or (l)(2); and the equipment conveys water with a total annual average concentration greater than or equal to 10 parts per million by weight of compounds listed in 40 CFR Part 63 Subpart G, Table 8, at an average annual flow rate greater than or equal to 0.02 liter per minute.	☐ Yes ☐ No
	Gas Streams	
39.	The application area includes gas streams meeting the characteristics of 40 CFR § 63.107(b) - (h) or the criteria of 40 CFR § 63.113(i) and are transferred to a control device not owned or operated by the applicant.	☐ Yes ☐ No
40.	The applicant is unable to comply with 40 CFR §§ 63.113 - 63.118 for one or more reasons described in 40 CFR § 63.100(q)(1), (3), or (5).	☐ Yes ☐ No
D.	**Subpart N - National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks**	
1.	The application area includes chromium electroplating or chromium anodizing tanks located at hard chromium electroplating, decorative chromium electroplating, and/or chromium anodizing operations.	☐ Yes ☒ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
E.	**Subpart O - Ethylene Oxide Emissions Standards for Sterilization Facilities**	
1.	The application area includes sterilization facilities where ethylene oxide is used in the sterilization or fumigation of materials. *If the response to Question VIII.E.1 is "No," go to Section VIII.F.*	☐ Yes ☒ No
2.	Sterilization facilities located in the application area are subject to 40 CFR Part 63, Subpart O. *If the response to Question VIII.E.2 is "No," go to Section VIII.F.*	☐ Yes ☐ No
3.	The sterilization source has used less than 1 ton (907 kg) of ethylene oxide within all consecutive 12-month periods after December 6, 1996.	☐ Yes ☐ No
4.	The sterilization source has used less than 10 tons (9070 kg) of ethylene oxide within all consecutive 12-month periods after December 6, 1996.	☐ Yes ☐ No
F.	**Subpart Q - National Emission Standards for Industrial Process Cooling Towers**	
1.	The application area includes industrial process cooling towers. *If the response to Question VIII.F.1 is "No," go to Section VIII.G.*	☒ Yes ☐ No
2.	Chromium-based water treatment chemicals have been used on or after September 8, 1994.	☐ Yes ☒ No
G.	**Subpart R - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)**	
1.	The application area includes a bulk gasoline terminal.	☐ Yes ☒ No
2.	The application area includes a pipeline breakout station. *If the responses to Questions VIII.G.1 and VIII.G.2 are both "No," go to Section VIII.H.*	☐ Yes ☒ No
3.	The bulk gasoline terminal or pipeline breakout station is located within a contiguous area and under common control with another bulk gasoline terminal or a pipeline breakout station. *If the response to Question VIII.G.3 is "Yes," go to Question VIII.G.10.*	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
G.	**Subpart R - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) (continued)**	
4.	The bulk gasoline terminal or pipeline breakout station is located within a contiguous area and under common control with sources, other than bulk gasoline terminals or pipeline breakout stations that emit or have the potential to emit HAPs. *If the response to Question VIII.G.4 is "Yes," go to Question VIII.G.10.*	☐ Yes ☐ No
5.	An emissions screening factor was calculated for the bulk gasoline terminal or pipeline breakout station. *If the response to Question VIII.G.5 is "No," go to Question VIII.G.10.*	☐ Yes ☐ No
6.	The value 0.04(OE) is less than 5% of the value of the bulk gasoline terminal emissions screening factor (ET) or the pipeline breakout station emissions screening factor (Ep). *If the response to Question VIII.G.6 is "No," go to Question VIII.G.10.*	☐ Yes ☐ No
7.	Emissions screening factor less than 0.5 (ET or EP < 0.5). *If the response to Question VIII.G.7 is "Yes," go to Section VIII.H.*	☐ Yes ☐ No
8.	Emissions screening factor greater than or equal to 0.5, but less than 1.0 (0.5 ≤ ET or EP < 1.0). *If the response to Question VIII.G.8 is "Yes," go to Section VIII.H.*	☐ Yes ☐ No
9.	Emissions screening factor greater than or equal to 1.0 (ET or EP ≥ 1.0). *If the response to Question VIII.G.9 is "Yes," go to Question VIII.G.11.*	☐ Yes ☐ No
10.	The site at which the application area is located is a major source of HAP. *If the response to Question VIII.G.10 is "No," go to Section VIII.H.*	☐ Yes ☐ No
11.	The application area is using an alternative leak monitoring program as described in 40 CFR § 63.424(f).	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
H.	**Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry**	
1.	The application area includes processes that produce pulp, paper, or paperboard and are located at a plant site that is a major source of HAPs as defined in 40 CFR § 63.2. *If the response to Question VIII.H.1 is "No," go to Section VIII.I.*	☐ Yes ☒ No
2.	The application area uses processes and materials specified in 40 CFR § 63.440(a)(1) - (3). *If the response to Question VIII.H.2 is "No," go to Section VIII.I.*	☐ Yes ☐ No
3.	The application area includes one or more sources subject to 40 CFR Part 63, Subpart S that are existing sources. *If the response to Question VIII.H.3 is "No," go to Section VIII.I.*	☐ Yes ☐ No
4.	The application area includes one or more kraft pulping systems that are existing sources.	☐ Yes ☐ No
5.	The application area includes one or more dissolving-grade bleaching systems that are existing sources at a kraft or sulfite pulping mill.	☐ Yes ☐ No
6.	The application area includes bleaching systems that are existing sources and are complying with the Voluntary Advanced Technology Incentives Program for Effluent Limitation Guidelines in 40 CFR § 430.24. *If the response to Question VIII.H.6 is "No," go to Section VIII.I.*	☐ Yes ☐ No
7.	The application area includes bleaching systems that are complying with 40 CFR § 63.440(d)(3)(i).	☐ Yes ☐ No
8.	The application area includes bleaching systems that are complying with 40 CFR § 63.440(d)(3)(ii).	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
I.	**Subpart T - National Emission Standards for Halogenated Solvent Cleaning**	
1.	The application area includes an individual batch vapor, in-line vapor, in-line cold, and/or batch cold solvent cleaning machine that uses a hazardous air pollutant (HAP) solvent, or any combination of halogenated HAP solvents, in a total concentration greater than 5% by weight, as a cleaning and/or drying agent.	☐ Yes ☒ No
2.	The application area is located at a major source and includes solvent cleaning machines, qualifying as affected facilities, that use perchloroethylene, trichloroethylene or methylene chloride.	☐ Yes ☒ No
3.	The application area is located at an area source and includes solvent cleaning machines, other than cold batch cleaning machines, that use perchloroethylene, trichloroethylene or methylene chloride.	☐ Yes ☒ No
J.	**Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group 1 Polymers and Resins**	
1.	The application area includes elastomer product process units and/or wastewater streams and wastewater operations that are associated with elastomer product process units. *If the response to Question VIII.J.1 is "No," go to Section VIII.K.*	☐ Yes ☒ No
2.	Elastomer product process units and/or wastewater streams and wastewater operations located in the application area are subject to 40 CFR Part 63, Subpart U. *If the response to Question VIII.J.2 is "No," go to Section VIII.K.*	☐ Yes ☐ No
3.	The application area includes process wastewater streams that are designated as Group 1 or are determined to be Group 1 for organic HAPs as defined in 40 CFR § 63.482.	☐ Yes ☐ No
4.	The application area includes process wastewater streams that are Group 2 for organic HAPs as defined in 40 CFR § 63.482.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
J.	**Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group 1 Polymers and Resins (continued)**	
5.	All Group 1 wastewater streams at the site are demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.J.5 is "Yes," go to Question VIII.J.15.*	☐ Yes ☐ No
6.	The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.J.6 is "No," go to Question VIII.J.8.*	☐ Yes ☐ No
7.	The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	☐ Yes ☐ No
8.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	☐ Yes ☐ No
9.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. *If the responses to Questions VIII.J.8 - VIII.J.9 are both "No," go to Question VIII.J.11.*	☐ Yes ☐ No
10.	The application area includes waste management units that receive or manage a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
J.	**Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group 1 Polymers and Resins (continued)**	
	Containers	
11.	The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	☐ Yes ☐ No
	Drains	
12.	The application area includes individual drain systems that receive or manage a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream. *If the response to Question VIII.J.12 is "No," go to Question VIII.J.15.*	☐ Yes ☐ No
13.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices.	☐ Yes ☐ No
14.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	☐ Yes ☐ No
15.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of an elastomer product process unit. *If the response to Question VIII.J.15 is "No," go to Section VIII.K.*	☐ Yes ☐ No
16.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that meet the criteria listed in 40 CFR § 63.149(d) and § 63.501(a)(12). *If the response to Question VIII.J.16 is "No," go to Section VIII.K.*	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
J.	**Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group 1 Polymers and Resins (continued)**	
	***Drains* (continued)**	
17.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.482, at any flow rate.	☐ Yes ☐ No
18.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.482, at an annual average flow rate greater than or equal to 10 liters per minute.	☐ Yes ☐ No
19.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of an elastomer product process unit that is a new affected source or part of a new affected source and the equipment conveys water with a total annual average concentration greater than or equal to 10 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.482, at an average annual flow rate greater than or equal to 0.02 liter per minute.	☐ Yes ☐ No
K.	**Subpart W - National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-nylon Polyamides Production**	
1.	The manufacture of basic liquid epoxy resins (BLR) and/or manufacture of wet strength resins (WSR) is conducted in the application area. *If the response to Question VIII.K.1 is "No" or "N/A," go to Section VIII.L.*	☐ Yes ☒ No ☐ N/A
2.	The application area includes a BLR and/or WSR research and development facility.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
L.	**Subpart X - National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting**	
1.	The application area includes one or more of the affected sources in 40 CFR § 63.541(a) that are located at a secondary lead smelter. *If the response to Question VIII.L.1 is "No" or "N/A," go to Section VIII.M.*	☐ Yes ☒ No ☐ N/A
2.	The application area is using and approved alternate to the requirements of § 63.545(c)(1)-(5) for control of fugitive dust emission sources.	☐ Yes ☐ No
M.	**Subpart Y - National Emission Standards for Marine Tank Vessel Loading Operations**	
1.	The application area includes marine tank vessel loading operations that are specified in 40 CFR § 63.560 and located at an affected source as defined in 40 CFR § 63.561.	☐ Yes ☒ No
N.	**Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries**	
	Applicability	
1.	The application area includes petroleum refining process units and/or related emission points that are specified in 40 CFR § 63.640(c)(1) - (c)(7). *If the response to Question VIII.N.1 is "No," go to Section VIII.O.*	☐ Yes ☒ No
2.	All petroleum refining process units/and or related emission points within the application area are specified in 40 CFR § 63.640(g)(1) - (g)(7). *If the response to Question VIII.N.2 is "Yes," go to Section VIII.O.*	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
N.	**Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (continued)**	
	***Applicability* (continued)**	
3.	The application area is located at a plant site that is a major source as defined in the Federal Clean Air Act § 112(a). *If the response to Question VIII.N.3 is "No," go to Section VIII.O.*	☐ Yes ☐ No
4.	The application area is located at a plant site which emits or has equipment containing/contacting one or more of the HAPs listed in table 1 of 40 CFR Part 63, Subpart CC. *If the response to Question VIII.N.4 is "No," go to Section VIII.O.*	☐ Yes ☐ No
5.	The application area includes Group 1 wastewater streams that are not conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR §§ 63.133 - 63.147 of Subpart G wastewater provisions section.	☐ Yes ☐ No
6.	The application area includes Group 2 wastewater streams that are not conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR §§ 63.133 - 63.147 of Subpart G wastewater provisions section.	☐ Yes ☐ No
7.	The application area includes Group 1 or Group 2 wastewater streams that are conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR §§ 63.133 - 63.147 of Subpart G wastewater provisions section. *If the response to Question VIII.N.7 is "No," go to Question VIII.N.13.*	☐ Yes ☐ No
8.	The application area includes Group 1 or Group 2 wastewater streams that are complying with 40 CFR § 63.640(o)(2)(i).	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
N.	**Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (continued)**	
	***Applicability* (continued)**	
9.	The application area includes Group 1 or Group 2 wastewater streams that are complying with 40 CFR § 63.640(o)(2)(ii). *If the response to Question VIII.N.9 is "No," go to Question VIII.N.13.*	☐ Yes ☐ No
10.	The application area includes Group 2 wastewater streams or organic streams whose benzene emissions are subject to control through the use of one or more treatment processes or waste management units under the provisions of 40 CFR Part 61, Subpart FF on or after December 31, 1992.	☐ Yes ☐ No
	Containers, Drains, and other Appurtenances	
11.	The application area includes containers that are subject to the requirements of 40 CFR § 63.135 as a result of complying with 40 CFR § 63.640(o)(2)(ii).	☐ Yes ☐ No
12.	The application area includes individual drain systems that are subject to the requirements of 40 CFR § 63.136 as a result of complying with 40 CFR § 63.640(o)(2)(ii).	☐ Yes ☐ No
13.	The application area includes Group 1 gasoline loading racks as specified in § 63.650(a).	☐ Yes ☐ No
O.	**Subpart DD - National Emission Standards for Off-site Waste and Recovery Operations**	
1.	The application area receives material that meets the criteria for off-site material as specified in 40 CFR § 63.680(b)(1). *If the response to Question VIII.O.1 is "No" or "N/A," go to Section VIII.P*	☐ Yes ☒ No ☐ N/A
2.	Materials specified in 40 CFR § 63.680(b)(2) are received at the application area.	☐ Yes ☐ No
3.	The application area has a waste management operation receiving off-site material and is regulated under 40 CFR Part 264 or Part 265.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
O.	**Subpart DD - National Emission Standards for Off-site Waste and Recovery Operations (continued)**	
4.	The application area has a waste management operation treating wastewater which is an off-site material and is exempted under 40 CFR §§ 264.1(g)(6) or 265.1(c)(10).	☐ Yes ☐ No
5.	The application area has an operation subject to Clean Water Act, § 402 or § 307(b) but is not owned by a "state" or "municipality."	☐ Yes ☐ No
6.	The predominant activity in the application area is the treatment of wastewater received from off-site.	☐ Yes ☐ No
7.	The application area has a recovery operation that recycles or reprocesses hazardous waste which is an off-site material and is exempted under 40 CFR §§ 264.1(g)(2) or 265.1(c)(6).	☐ Yes ☐ No
8.	The application area has a recovery operation that recycles or reprocesses used solvent which is an off-site material and is not part of a chemical, petroleum, or other manufacturing process that is required to use air emission controls by another subpart of 40 CFR Part 63 or Part 61.	☐ YES ☐ No
9.	The application area has a recovery operation that re-refines or reprocesses used oil which is an off-site material and is regulated under 40 CFR Part 279, Subpart F (Standards for Used Oil Processors and Refiners).	☐ Yes ☐ No
10.	The application area is located at a site where the total annual quantity of HAPs in the off-site material is less than 1 megagram per year. *If the response to Question VIII.O.10 is "Yes," go to Section VIII.P.*	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
O.	**Subpart DD - National Emission Standards for Off-site Waste and Recovery Operations (continued)**	
11.	The application area receives offsite materials with average VOHAP concentration less than 500 ppmw at the point of delivery that are not combined with materials having a VOHAP concentration of 500 ppmw or greater. *If the response to Question VIII.O.11 is "No," go to Question VIII.O.14.*	☐ Yes ☐ No
12.	VOHAP concentration is determined by direct measurement.	☐ Yes ☐ No
13.	VOHAP concentration is based on knowledge of the off-site material.	☐ Yes ☐ No
14.	The application area includes an equipment component that is a pump, compressor, and agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector or instrumentation system. *If the response to Question VIII.O.14 is "No," go to Question VIII.O.17.*	☐ Yes ☐ No
15.	An equipment component in the application area contains or contacts off-site material with a HAP concentration greater than or equal to 10% by weight.	☐ Yes ☐ No
16.	An equipment component in the application area is intended to operate 300 hours or more during a 12-month period.	☐ Yes ☐ No
17.	The application area includes containers that manage non-exempt off-site material.	☐ Yes ☐ No
18.	The application area includes individual drain systems that manage non-exempt off-site materials.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**		
	P.	**Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities**	
	1.	The application area includes facilities that manufacture or rework commercial, civil, or military aerospace vehicles or components. *If the response to Question VIII.P.1 is "No" or "N/A," go to Section VIII.Q.*	☐ Yes ☒ No ☐ N/A
	2.	The application area includes one or more of the affected sources specified in 40 CFR § 63.741(c)(1) - (7).	☐ Yes ☐ No
	Q.	**Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities.**	
♦	1.	The application area contains facilities that process, upgrade or store hydrocarbon liquids that are located at oil and natural gas production facilities prior to the point of custody transfer.	☐ Yes ☒ No
♦	2.	The application area contains facilities that process, upgrade or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. *For SOP applications, if the responses to Questions VIII.Q.1 and VIII.Q.2 are both "No," go to Section VIII.R.* *For GOP applications, if the responses to Questions VIII.Q.1 and VIII.Q.2 are both "No," go to Section VIII.Z.*	☐ Yes ☒ No
♦	3.	The application area contains only facilities that exclusively process, store or transfer black oil as defined in § 63.761. *For SOP applications, if the response to Question VIII.Q.3 is "Yes," go to Section VIII.R.* *For GOP applications, if the response to Question VIII.Q.3 is "Yes," go to Section VIII.Z.*	☐ Yes ☐ No
♦	4.	The application area is located at a site that is a major source of HAP. *If the response to Question VIII.Q.4 is "No," go to Question VIII.Q.6.*	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**		
	Q.	**Subpart - HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities (continued)**	
♦	5.	The application area contains only a facility, prior to the point of custody transfer, with facility-wide actual annual average natural gas throughput less than 18.4 thousand standard cubic meters (649,789.9 ft^3) per day and a facility-wide actual annual average hydrocarbon liquid throughput less than 39,700 liters (10,487.6 gallons) per day. *For SOP applications, if the response to Question VIII.Q.5 is "Yes," go to Section VIII.R.* *For GOP applications, if the response to Question VIII.Q.5 is "Yes," go to Section VIII.Z.* *For all applications, if the response to Question VIII.Q.5 is "No," go to Question VIII.Q.9.*	☐ Yes ☐ No
♦	6.	The application area includes a triethylene glycol (TEG) dehydration unit. *For SOP applications, f the answer to Question VIII.Q.6 is "No," go to Section VIII.R. For GOP applications, if the response to Question VIII.Q.6 is "No," go to Section VIII.Z.*	☐ Yes ☐ No
♦	7.	The application area is located at a site that is within the boundaries of UA plus offset or a UC, as defined in 40 CFR § 63.761.	☐ Yes ☐ No
♦	8.	The site has actual emissions of 5 tons per year or more of a single HAP, or 12.5 tons per year or more of a combination of HAP.	☐ Yes ☐ No
♦	9.	Emissions for major source determination are being estimated based on the maximum natural gas or hydrocarbon liquid throughput as calculated in § 63.760(a)(1)(i)-(iii).	☐ Yes ☐ No

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
R.	**Subpart II - National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)**	
1.	The application area includes shipbuilding or ship repair operations. *If the response to Question VIII.R.1 is "NO," go to Section VIII.S.*	☐ Yes ☒ No
2.	Shipbuilding or ship repair operations located in the application area are subject to 40 CFR Part 63, Subpart II.	☐ Yes ☐ No
S.	**Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations**	
1.	The application area includes wood furniture manufacturing operations and/or wood furniture component manufacturing operations. *If the response to Question VIII.S.1 is "No" or "N/A," go to Section VIII.T.*	☐ Yes ☒ No ☐ N/A
2.	The application area meets the definition of an "incidental wood manufacturer" as defined in 40 CFR § 63.801.	☐ Yes ☐ No
T.	**Subpart KK - National Emission Standards for the Printing and Publishing Industry**	
1.	The application area includes publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses.	☐ Yes ☒ No ☐ N/A
U.	**Subpart PP - National Emission Standards for Containers**	
1.	The application area includes containers for which another 40 CFR Part 60, 61, or 63 subpart references the use of 40 CFR Part 63, Subpart PP for the control of air emissions. *If the response to Question VIII.U.1 is "NO," go to Section VIII.V.*	☐ Yes ☒ No
2.	The application area includes containers using Container Level 1 controls.	☐ Yes ☐ No
3.	The application area includes containers using Container Level 2 controls.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
U.	**Subpart PP - National Emission Standards for Containers (continued)**	
4.	The application area includes containers using Container Level 3 controls.	☐ Yes ☐ No
V.	**Subpart RR - National Emission Standards for Individual Drain Systems**	
1.	The application area includes individual drain systems for which another 40 CFR Part 60, 61, or 63 subpart references the use of 40 CFR Part 63, Subpart RR for the control of air emissions.	☐ Yes ☒ No
W.	**Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards**	
1.	The application area includes an acetal resins production process unit; an acrylic and modacrylic fiber production process unit complying with 40 CFR § 63.1103(b)(3)(i); or an existing polycarbonate production process.	☐ Yes ☒ No
2.	The application area includes process wastewater streams generated from an acetal resins production process unit; an acrylic and modacrylic fiber production process unit complying with 40 CFR § 63.1103(b)(3)(i); or an existing polycarbonate production process. *If the responses to Questions VIII.W.1 and VIII.W.2 are both "No," go to Question VIII.W.20.*	☐ Yes ☒ No
3.	The application area includes process wastewater streams that are designated as Group 1 or are determined to be Group 1 under the requirements of 40 CFR § 63.132(c).	☐ Yes ☐ No
4.	The application area includes process wastewater streams that are determined to be Group 2 under the requirements of 40 CFR § 63.132(c).	☐ Yes ☐ No
5.	All Group 1 wastewater streams at the site are determined to have a total source mass flow rate of less than 1 MG/yr.	☐ Yes ☐ No
6.	The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.W.6 is "No," go to Question VIII.W.8.*	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
W.	**Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)**	
7.	The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	☐ Yes ☐ No
8.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	☐ Yes ☐ No
9.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. *If the responses to Questions VIII.W.8 and W.9 are both "No," go to Question VIII.W.11.*	☐ Yes ☐ No
10.	The application area includes waste management units that receive or manage a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	☐ Yes ☐ No
11.	The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	☐ Yes ☐ No
12.	The application area includes individual drain systems that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. *If the response to Question VIII.W.12 is "No," go to Question VIII.W.15.*	☐ Yes ☐ No
13.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of covers and, if vented, closed vent systems and control devices.	☐ Yes ☐ No
14.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
W.	**Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)**	
15.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of an acetal resins production process unit; an acrylic and modacrylic fiber production process unit complying with 40 CFR § 63.1103(b)(3)(i); or an existing polycarbonate production process unit. *If the response to Question VIII.W.15 is "No," go to Question VIII.W.20.*	☐ Yes ☐ No
16.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that meet the criteria listed in 40 CFR § 63.1106(c)(1) - (3). *If the response to Question VIII.W.16 is "No," go to Question VIII.W.20.*	☐ Yes ☐ No
17.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds meeting the definition of organic HAP in Table 9 to 40 CFR Part 60, Subpart G, at any flow rate.	☐ Yes ☐ No
18.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds meeting the definition of organic HAP in Table 9 to 40 CFR Part 60, Subpart G, at an annual average flow rate greater than or equal to 10 liters per minute.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
W.	**Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)**	
19.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of an acrylic resins or acrylic and modacrylic fiber production process unit that is part of a new affected source or is a new affected source and the equipment conveys water with a total annual average concentration greater than or equal to 10 ppmw of compounds meeting the definition of organic HAP in Table 9 to 40 CFR Part 60, Subpart G, at an average annual flow rate greater than or equal to 0.02 liter per minute.	☐ Yes ☐ No
20.	The application area includes an ethylene production process unit.	☒ Yes ☐ No ☐ N/A
21.	The application area includes waste streams generated from an ethylene production process unit. *If the responses to Questions VIII.W.20 and VIII.W.21 are both "No" or "N/A," go to Question VIII.W.54.*	☒ Yes ☐ No ☐ N/A
22.	The waste stream(s) contains at least one of the chemicals listed in 40 CFR § 63.1103(e), Table 7(g)(1). *If the response to Question VIII.W.22 is "No," go to Question VIII.W.54.*	☒ Yes ☐ No
23.	Waste stream(s) are transferred off-site for treatment. *If the response to Question VIII.W.23 is "No," go to Question VIII.W.25.*	☒ Yes ☐ No
24.	The application area has waste management units that treat or manage waste stream(s) prior to transfer off-site for treatment. *If the response to Question VIII.W.24 is "No," go to Question VIII.W.54.*	☒ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
W.	**Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)**	
25.	The total annual benzene quantity from waste at the site is less than 10 Mg/yr as determined according to 40 CFR § 61.342(a).	☐ Yes ☒ No
26.	The application area contains at least one waste stream that is a continuous butadiene waste stream as defined in 40 CFR § 63.1082(b). *If the response to Question VIII.W.26 is "No," go to Question VIII.W.43.*	☐ Yes ☒ No
27.	The waste stream(s) contains at least 10 ppmw 1, 3-butadiene at a flow rate of 0.02 liters per minute or is designated for control. *If the response to Question VIII.W.27 is "No," go to Question VIII.W.43.*	☐ Yes ☐ No
28.	The control requirements of 40 CFR Part 63, Subpart G for process wastewater as specified in 40 CFR § 63.1095(a)(2) are selected for control of the waste stream(s). *If the response to Question VIII.W.28 is "No," go to Question VIII.W.33.*	☐ Yes ☐ No
29.	The application area includes containers that receive, manage, or treat a continuous butadiene waste stream.	☐ Yes ☐ No
30.	The application area includes individual drain systems that receive, manage, or treat a continuous butadiene waste stream. *If the response to Question VIII.W.30 is "No," go to Question VIII.W.43.*	☐ Yes ☐ No
31.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
W.	**Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)**	
32.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs. *If the response to Question VIII.W.32 is required, go to Question VIII.W.43.*	☐ Yes ☐ No
33.	The application area has containers, as defined in 40 CFR § 61.341, that receive a continuous butadiene waste stream. *If the response to Question VIII.W.33 is "No," go to Question VIII.W.36.*	☐ Yes ☐ No
34.	The application area is an alternate means of compliance to meet the 40 CFR § 61.345 requirements for containers. *If the response to Question VIII.W.34 is "Yes," go to Question VIII.W.36.*	☐ Yes ☐ No
35.	Covers and closed-vent systems used for containers operate such that the container is maintained at a pressure less than atmospheric pressure.	☐ Yes ☐ No
36.	The application area has individual drain systems, as defined in 40 CFR § 61.341, that receive or manage a continuous butadiene waste stream. *If the response to Question VIII.W.36 is "No," go to Question VIII.W.43.*	☐ Yes ☐ No
37.	The application area is using an alternate means of compliance to meet the 40 CFR § 61.346 requirements for individual drain systems. *If the response to Question VIII.W.37 is "Yes," go to Question VIII.W.43.*	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
W.	**Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)**	
38.	The application area has individual drain systems complying with 40 CFR § 61.346(a). *If the response to Question VIII.W.38 is "No," go to Question VIII.W.40.*	☐ Yes ☐ No
39.	Covers and closed-vent systems used for individual drain systems operate such that the individual drain system is maintained at a pressure less than atmospheric pressure.	☐ Yes ☐ No
40.	The application area has individual drain systems complying with 40 CFR § 61.346(b). *If the response to Question VIII.W.40 is "No," go to Question VIII.W.43.*	☐ Yes ☐ No
41.	Junction boxes in the individual drain systems are equipped with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation.	☐ Yes ☐ No
42.	Junction box vent pipes in the individual drain systems are connected to a closed-vent system and control device.	☐ Yes ☐ No
43.	The application area has at least one waste stream that contains benzene. *If the response to Question VIII.W.43 is "No," go to Question VIII.W.54.*	☒ Yes ☐ No
44.	The application area has containers, as defined in 40 CFR § 61.341, that receive a waste stream containing benzene. *If the response to Question VIII.W.44 is "No," go to Question VIII.W.47.*	☒ Yes ☐ No
45.	The application area is an alternate means of compliance to meet the 40 CFR § 61.345 requirements for containers. *If the response to Question VIII.W.45 is "Yes," go to Question VIII.W.47.*	☐ Yes ☒ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
W.	**Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)**	
46.	Covers and closed-vent systems used for containers operate such that the container is maintained at a pressure less than atmospheric pressure.	☐ Yes ☒ No
47.	The application area has individual drain systems, as defined in 40 CFR § 61.341, that receive or manage a waste stream containing benzene. *If the response to Question VIII.W.47 is "No," go to Question VIII.W.54.*	☒ Yes ☐ No
48.	The application area is using an alternate means of compliance to meet the 40 CFR § 61.346 requirements for individual drain systems. *If the response to Question VIII.W.48 is "Yes," go to Question VIII.W.54.*	☐ Yes ☒ No
49.	The application area has individual drain systems complying with 40 CFR § 61.346(a). *If the response to Question VIII.W.49 is "No," go to Question VIII.W.51.*	☒ Yes ☐ No
50.	Covers and closed-vent systems used for individual drain systems operate such that the individual drain system is maintained at a pressure less than atmospheric pressure.	☐ Yes ☒ No
51.	The application area has individual drain systems complying with 40 CFR § 61.346(b). *If the response to Question VIII.W.51 is "No," go to Question VIII.W.54.*	☒ Yes ☐ No
52.	Junction boxes in the individual drain systems are equipped with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation.	☒ Yes ☐ No

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
W.	**Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)**	
53.	Junction box vent pipes in the individual drain systems are connected to a closed-vent system and control device.	☒ Yes ☐ No
54.	The application area contains a cyanide chemicals manufacturing process. *If the response to Question VIII.W.54 is "No," go to Section VIII.X.*	☐ Yes ☒ No
55.	The cyanide chemicals manufacturing process generates maintenance wastewater containing hydrogen cyanide or acetonitrile.	☐ Yes ☐ No
X.	**Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins**	
1.	The application area includes thermoplastic product process units, and/or their associated affected sources specified in 40 CFR § 63.1310(a)(1) - (5), that are subje ct to 40 CFR Part 63, Subpart JJJ. *If the response to Question VIII.X.1 is "No," go to Section VIII.Y.*	☐ Yes ☒ No
2.	The application area includes thermoplastic product process units and/or wastewater streams and wastewater operations that are associated with thermoplastic product process units. *If the response to Question VIII.X.2 is "No," go to Section VIII.Y.*	☐ Yes ☐ No
3.	All process wastewater streams generated or managed in the application area are from sources producing polystyrene. *If the response to Question VIII.X.3 is "Yes," go to Section VIII.Y.*	☐ Yes ☐ No
4.	All process wastewater streams generated or managed in the application area are from sources producing ASA/AMSAN. *If the response to Question VIII.X.4 is "Yes," go to Section VIII.Y.*	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
X.	**Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (continued)**	
5.	The application area includes process wastewater streams that are designated as Group 1 or are determined to be Group 1 for organic HAPs as defined in 40 CFR § 63.1312.	☐ Yes ☐ No
6.	The application area includes process wastewater streams, located at existing sources, that are Group 2 for organic HAPs as defined in 40 CFR § 63.1312.	☐ Yes ☐ No
7.	The application area includes process wastewater streams, located at new sources, that are Group 2 for organic HAPs as defined in 40 CFR § 63.1312.	☐ Yes ☐ No
8.	All Group 1 wastewater streams at the site are demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.X.8 is "Yes," go to Question VIII.X.18.*	☐ Yes ☐ No
9.	The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.X.9 is "No," go to Question VIII.X.11.*	☐ Yes ☐ No
10.	The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	☐ Yes ☐ No
11.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	☐ Yes ☐ No
12.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. *If the responses to Questions VIII.X.11 - VIII.X.12 are both "No," go to Question VIII.X.14.*	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
X.	**Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (continued)**	
13.	The application area includes waste management units that receive or manage a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	☐ Yes ☐ No
	Containers	
14.	The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	☐ Yes ☐ No
	Drains	
15.	The application area includes individual drain systems that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. *If the response to Question VIII.X.15 is "No," go to Question VIII.X.18.*	☐ Yes ☐ No
16.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices.	☐ Yes ☐ No
17.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	☐ Yes ☐ No
18.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of a thermoplastic product process unit. *If the response to Question VIII.X.18 is "No," go to Section VIII.Y.*	☐ Yes ☐ No

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
	X. Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (continued)	
	***Drains* (continued)**	
19.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that meet the criteria listed in 40 CFR § 63.149(d) and § 63.1330(b)(12). *If the response to Question VIII.X.19 is "NO," go to Section VIII.Y.*	☐ Yes ☐ No
20.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.1312, at any flow rate.	☐ Yes ☐ No
21.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.1312, at an annual average flow rate greater than or equal to 10 liters per minute.	☐ Yes ☐ No
22.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of an thermoplastic product process unit that is a new affected source or part of a new affected source and the equipment conveys water with a total annual average concentration greater than or equal to 10 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.1312, at an average annual flow rate greater than or equal to 0.02 liter per minute	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**		
	Y.	**Subpart UUU - National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units.**	
	1.	The application area is subject to 40 CFR Part 63, Subpart UUU - National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units.	☐ Yes ☒ No
	Z.	**Subpart AAAA - National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste (MSW) Landfills.**	
♦	1.	The application area is subject to 40 CFR Part 63, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfills.	☐ Yes ☒ No
	AA.	**Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON)**	
	1.	The application area is located at a site that includes process units that manufacture as a primary product one or more of the chemicals listed in 40 CFR § 63.2435(b)(1).	☒ Yes ☐ No
	2.	The application area is located at a plant site that is a major source as defined in FCAA § 112(a).	☒ Yes ☐ No
	3.	The application area is located at a site that includes miscellaneous chemical manufacturing process units (MCPU) that process, use or generate one or more of the organic hazardous air pollutants listed in § 112(b) of the Clean Air Act or hydrogen halide and halogen HAP. *If the response to Question VIII.AA.1, AA.2 or AA.3 is "No," go to Section VIII.BB.*	☒ Yes ☐ No
	4.	The application area includes process vents, storage vessels, transfer racks, or waste streams associated with a miscellaneous chemical manufacturing process subject to 40 CFR 63, Subpart FFFF. *If the response to Question VIII.AA.4 is "No," go to Section VIII.BB.*	☐ Yes ☒ No

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
	AA. Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON) (continued)	
5.	The application area includes process wastewater streams. *If the response to Question VIII.AA.5 is "No," go to Question VIII.AA.24.*	☐ Yes ☐ No
6.	The application area includes process wastewater streams, located at existing sources, that are designated as Group 1 or are determined to be Group 1 for compounds listed in Table 8 of 40 CFR Part 63, Subpart G or Table 8 and Table 9 of 40 CFR Part 63, Subpart FFFF, as appropriate.	☐ Yes ☐ No
7.	The application area includes process wastewater streams, located at existing sources, that are Group 2 for compounds listed in Table 8 or Table 8 and Table 9 of 40 CFR Part 63, Subpart FFFF, as appropriate.	☐ Yes ☐ No
8.	The application area includes process wastewater streams, located at new sources, that are designated as Group 1 or are determined to be Group 1 for compounds listed in Table 8 of 40 CFR Part 63, Subpart G or Table 8 and Table 9 of 40 CFR Part 63, Subpart FFFF, as appropriate.	☐ Yes ☐ No
9.	The application area includes process wastewater streams, located at new sources, that are Group 2 for compounds listed in Table 8 or Table 8 and Table 9 of 40 CFR Part 63, Subpart FFFF, as appropriate.	☐ Yes ☐ No
10.	All Group 1 wastewater streams at the site are demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.AA.10 is "Yes," go to Question VIII.AA.24.*	☐ Yes ☐ No
11.	The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.AA.11 is "No," go to Question VIII.AA.13.*	☐ Yes ☐ No
12.	The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	☐ Yes ☐ No
13.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
AA.	**Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON) (continued)**	
14.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. *If the responses to Questions VIII.AA.13 and VIII.AA.14 are both "No," go to Question VIII.AA.20.*	☐ Yes ☐ No
15.	Group 1 wastewater streams are transferred to an offsite treatment facility meeting the requirements of 40 CFR § 63.138(h). *If the response to Question VIII.AA.15 is "No," go to Question VIII.AA.17.*	☐ Yes ☐ No
16.	The option to document in the notification of compliance status report that the wastewater will be treated in a facility meeting the requirements of 40 CFR § 63.138(h) is elected.	☐ Yes ☐ No
17.	Group 1 wastewater streams or residuals with a total annual average concentration of compounds in Table 8 of 40 CFR Part 63, Subpart FFFF less than 50 ppmw are transferred offsite. *If the response to Question VIII.AA.17 is "No," go to Question VIII.AA.19.*	☐ Yes ☐ No
18.	The transferor is demonstrating that less than 5 percent of the HAP in Table 9 of 40 CFR Part 63, Subpart FFFF is emitted from waste management units up to the activated sludge unit.	☐ Yes ☐ No
19.	The application area includes waste management units that receive or manage a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	☐ Yes ☐ No
20.	The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	☐ Yes ☐ No
21.	The application area includes individual drain systems that receive or manage a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream. *If the response to Question VIII.AA.21 is "No," go to Question VIII.AA.24.*	☐ Yes ☐ No
22.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices.	☐ Yes ☐ No

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
	AA. Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON) (continued)	
23.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	☐ Yes ☐ No
24.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of a chemical manufacturing process unit that meets the criteria of 40 CFR § 63.100(b). *If the response to Question VIII.AA.24 is "No," go to Section VIII.BB.*	☐ Yes ☐ No
25.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes (that are part of a miscellaneous chemical manufacturing process unit) that meet the criteria listed in 40 CFR § 63.149(d). *If the response to Question VIII.AA.25 is "No," go to Section VIII.BB.*	☐ Yes ☐ No
26.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration of compounds in table 8 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 10,000 ppmw at any flow rate, and the total annual load of compounds in table 8 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 200 lb/yr.	☐ Yes ☐ No
27.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that convey water with a total annual average concentration of compounds in table 8 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 1,000 ppmw, and the annual average flow rate is greater than or equal to 1 liter per minute.	☐ Yes ☐ No
28.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of a chemical manufacturing process unit that is subject to the new source requirements of 40 CFR § 63.2445(a); and the equipment conveys water with a combined total annual average concentration of compounds in tables 8 and 9 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to this subpart is greater than or equal to 1 tpy.	☐ Yes ☐ No

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
BB.	**Subpart GGGG - National Emission Standards for Hazardous Air Pollutants for: Solvent Extractions for Vegetable Oil Production.**	
1.	The application area includes a vegetable oil production process that: is by itself a major source of HAP emissions or, is collocated within a plant site with other sources that are individually or collectively a major source of HAP emissions.	☐ Yes ☒ No
CC.	**Subpart GGGGG - National Emission Standards for Hazardous Air Pollutants: Site Remediation**	
1.	The application area includes a facility at which a site remediation is conducted. *If the answer to Question VIII.CC.1 is "No," go to Section VIII.DD.*	☐ Yes ☒ No
2.	The application area is located at a site that is a major source of HAP. *If the answer to Question VIII.CC.2 is "No," go to Section VIII.DD.*	☐ Yes ☐ No
3.	All site remediations qualify for one of the exemptions contained in 40 CFR § 63.7881(b)(1) through (6). *If the answer to Question VIII.CC.3 is "Yes," go to Section VIII.DD.*	☐ Yes ☐ No
4.	All site remediation activities are complete, and the Administrator has been notified in writing. *If the answer to Question VIII.CC.4 is "Yes," go to Section VIII.DD.*	☐ Yes ☐ No
5.	Prior to beginning site remediation activities, it was determined that the total quantity of HAP listed in Table 1 of Subpart GGGGG that will be removed during all site remediations will be less than 1 Mg/yr. *If the answer to Question VIII.CC.5 is "Yes," go to Section VIII.DD.*	☐ Yes ☐ No
6.	The site remediation will be completed within 30 consecutive calendar days.	☐ Yes ☐ No
7.	No site remediation will exceed 30 consecutive calendar days. *If the answer to Question VIII.CC.7 is "Yes," go to Section VIII.DD.*	☐ Yes ☐ No
8.	Site remediation materials subject to 40 CFR Part 63, Subpart GGGGG are transferred from the application area to an off-site facility.	☐ Yes ☐ No
9.	All site remediation materials subject to 40 CFR Part 63, Subpart GGGGG are transferred from the application area to an off-site facility. *If the answer to Question VIII.CC.9 is "Yes," go to Section VIII.DD.*	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
	CC. Subpart GGGGG - National Emission Standards for Hazardous Air Pollutants: Site Remediation (continued)	
10.	The application area includes a remediation material management unit used for cleanup of radioactive mixed waste per § 63.7886(c).	☐ Yes ☐ No
11.	The application area includes a remediation material management unit or combination of units with a total annual quantity of HAP less than 1 Mg/yr that is being exempted from § 63.7886(b) per § 63.7886(d).	☐ Yes ☐ No
12.	The application area includes a remediation material management unit that has an average total VOHAP concentration of remediation material less than 500 ppmw and is complying with § 63.7886(b)(2). *If the response to Question VIII.CC.12 is "No," go to Question VIII.CC.14.*	☐ Yes ☐ No
13.	The application area includes a remediation material management unit that concentrates all or part of the material such that the material's VOHAP concentration could increase.	☐ Yes ☐ No
14.	The application area includes containers that manage site remediation materials subject to 40 CFR Part 63, Subpart GGGGG. *If the response to Question VIII.CC.14 is "No," go to Question VIII.CC.21.*	☐ Yes ☐ No
15.	The application area includes containers that are also subject to and complying with another subpart under 40 CFR part 61 or part 63 per § 63.7886(b)(3).	☐ Yes ☐ No
16.	The application area includes containers that are complying with alternative work practice standards that have been approved by the EPA per § 63.7900(e).	☐ Yes ☐ No
17.	The application area includes containers using Container Level 1 controls as specified in 40 CFR § 63.922(b).	☐ Yes ☐ No
18.	The application area includes containers with a capacity greater than 0.46 m^3 that meet the requirements of 40 CFR § 63.7900(b)(3)(i) and (ii).	☐ Yes ☐ No
19.	The application area includes containers using Container Level 2 controls as specified in 40 CFR § 63.923(b).	☐ Yes ☐ No
20.	The application area includes containers using Container Level 3 controls as specified in 40 CFR § 63.924(b).	☐ Yes ☐ No
21.	The application area includes individual drain systems complying with the requirements of 40 CFR § 63.962.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
DD.	**Subpart YYYYY - National Emission Standards for Hazardous Air Pollutants for Area/Sources: Electric Arc Furnace Steelmaking Facilities**	
1.	The application area includes an electric arc furnace (EAF) steelmaking facility, and the site is an area source of hazardous air pollutant (HAP) emissions. *If the response to Question VIII.DD.1 is "No," go to Section VIII.EE.*	☐ Yes ☒ No
2.	The EAF steelmaking facility is a research and development facility. *If the response to Question VIII.DD.2 is "Yes," go to Section VIII.EE.*	☐ Yes ☐ No
3.	Metallic scrap is utilized in the EAF.	☐ Yes ☐ No
4.	Scrap containing motor vehicle scrap is utilized in the EAF.	☐ Yes ☐ No
5.	Scrap not containing motor vehicle scrap is utilized in the EAF.	☐ Yes ☐ No
EE.	**Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities**	
1.	The application area is located at a site that is an area source of HAPs. *If the answer to Question EE.1 is "No," go to Section VIII.FF.*	☐ Yes ☒ No
2.	The application area includes a pipeline breakout station, as defined in 40 CFR Part 63, Subpart BBBBBB, not subject to the control requirements of 40 CFR Part 63, Subpart R.	☐ Yes ☐ No
3.	The application area includes a pipeline pumping station as defined in 40 CFR Part 63, Subpart BBBBBB.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**	
EE.	**Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities (continued)**	
4.	The application area includes a bulk gasoline plant as defined in 40 CFR Part 63, Subpart BBBBBB. *If the answer to Question VIII.EE.4 is "No," go to Question VIII.EE.6.*	☐ Yes ☐ No
5.	The bulk gasoline plant was operating, prior to January 10, 2010, in compliance with an enforceable State, local or tribal rule or permit that requires submerged fill as specified in 40 CFR § 63.11086(a).	☐ Yes ☐ No
6.	The application area includes a bulk gasoline terminal, as defined in 40 CFR Part 63, Subpart BBBBBB, not subject to the control requirements of 40 CFR Part 63, Subpart R or Subpart CC. *If the answer to Question VIII.EE.6 is "No," go to Section VIII.FF.*	☐ Yes ☐ No
7.	The bulk gasoline terminal has throughput of less than 250,000 gallons per day. *If the answer to Question VIII.EE.7 is "Yes," go to Section VIII.FF.*	☐ Yes ☐ No
8.	The bulk gasoline terminal loads gasoline into gasoline cargo tanks other than railcar cargo tanks.	☐ Yes ☐ No
9.	The bulk gasoline terminal loads gasoline into railcar cargo tanks. *If the answer to Question VIII.EE.9 is "No," go to Section VIII.FF.*	☐ Yes ☐ No
10.	The bulk gasoline terminal loads gasoline into railcar cargo tanks which do not collect vapors from a vapor balance system.	☐ Yes ☐ No

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VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)**		
	EE.	**Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities (continued)**	
	11.	The bulk gasoline terminal loads gasoline into railcar cargo tanks which collect vapors from a vapor balance system and that system complies with a Federal, State, local, tribal rule or permit.	☐ Yes ☐ No
	FF.	**Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities**	
♦	1.	The application area is located at a site that is an area source of hazardous air pollutants. *If the answer to Question VIII.FF.1 is "No," go to Section VIII.GG.*	☐ Yes ☒ No
♦	2.	The application area includes at least one gasoline dispensing facility as defined in 40 CFR § 63.11132. *If the answer to Question VIII.FF.2 is "No," go to Section VIII.GG.*	☐ Yes ☐ No
♦	3.	The application area includes at least one gasoline dispensing facility with a monthly throughput of less than 10,000 gallons.	☐ Yes ☐ No
♦	4.	The application area includes at least one gasoline dispensing facility where gasoline is dispensed from a fixed gasoline storage tank into a portable gasoline tank for the on-site delivery and subsequent dispensing into other gasoline-fueled equipment.	☐ Yes ☐ No
	GG.	**Recently Promulgated 40 CFR Part 63 Subparts**	
♦	1.	The application area is subject to one or more promulgated 40 CFR Part 63 subparts not addressed on this form. *If the response to Question VIII.GG.1 is "No," go to Section IX. A list of promulgated 40 CFR Part 63 subparts not otherwise addressed on OP-REQ1 is included in the instructions.*	☒ Yes ☐ No
♦	2.	Provide the Subpart designation (i.e. Subpart EEE) in the space provided below.	
Subpart ZZZZ, Subpart YY RTR Amendments			

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IX.	**Title 40 Code of Federal Regulations Part 68 (40 CFR Part 68) - Chemical Accident Prevention Provisions**		
	A.	**Applicability**	
♦	1.	The application area contains processes subject to 40 CFR Part 68, Chemical Accident Prevention Provisions, and specified in 40 CFR § 68.10.	☒ Yes ☐ No
	X.	**Title 40 Code of Federal Regulations Part 82 (40 CFR Part 82) - Protection of Stratospheric Ozone**	
	A.	**Subpart A - Production and Consumption Controls**	
♦	1.	The application area is located at a site that produces, transforms, destroys, imports, or exports a controlled substance or product.	☐ Yes ☒ No ☐ N/A
	B.	**Subpart B - Servicing of Motor Vehicle Air Conditioners**	
♦	1.	Servicing, maintenance, and/or repair of fleet vehicle air conditioning systems using ozone-depleting refrigerants is conducted in the application area.	☐ Yes ☒ NO
	C.	**Subpart C - Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances**	
♦	1.	The application area sells or distributes one or more nonessential products (which release a Class I or Class II substance) that are subject to 40 CFR Part 82, Subpart C.	☐ Yes ☒ No ☐ N/A
	D.	**Subpart D - Federal Procurement**	
♦	1.	The application area is owned/operated by a department, agency, or instrumentality of the United States.	☐ Yes ☒ No ☐ N/A
	E.	**Subpart E - The Labeling of Products Using Ozone Depleting Substances**	
♦	1.	The application area includes containers in which a Class I or Class II substance is stored or transported prior to the sale of the Class I or Class II substance to the ultimate consumer.	☐ Yes ☒ No ☐ N/A
♦	2.	The application area is a manufacturer, importer, wholesaler, distributor, or retailer of products containing a Class I or Class II substance.	☐ Yes ☒ No ☐ N/A
♦	3.	The application area is a manufacturer, importer, wholesaler, distributor, or retailer of products manufactured with a process that uses a Class I or Class II substance.	☐ Yes ☒ No ☐ N/A

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X.	**Title 40 Code of Federal Regulations Part 82 (40 CFR Part 82) - Protection of Stratospheric Ozone (continued)**		
	F.	**Subpart F - Recycling and Emissions Reduction**	
♦	1.	Servicing, maintenance, and/or repair on refrigeration and non-motor vehicle air condition appliances using ozone-depleting refrigerants or non-exempt substitutes is conducted in the application area.	☒ Yes ☐ No
♦	2.	Disposal of appliances (including motor vehicle air conditioners) or refrigerant or non-exempt substitute reclamation occurs in the application area.	☐ Yes ☒ No ☐ N/A
♦	3.	The application area manufactures appliances or refrigerant recycling and recovery equipment.	☐ Yes ☒ No ☐ N/A
	G.	**Subpart G - Significant New Alternatives Policy Program**	
♦	1.	The application area manufactures, formulates, or creates chemicals, product substitutes, or alternative manufacturing processes that are intended for use as a replacement for a Class I or Class II compound. *If the response to Question X.G.1 is "No" or "N/A," go to Section X.H.*	☐ Yes ☒ No ☐ N/A
♦	2.	All substitutes produced by the application area meet one or more of the exemptions in 40 CFR § 82.176(b)(1) - (7).	☐ Yes ☐ No ☐ N/A
	H.	**Subpart H -Halon Emissions Reduction**	
♦	1.	Testing, servicing, maintaining, repairing, or disposing of equipment containing halons is conducted in the application area.	☐ Yes ☒ No ☐ N/A
♦	2.	Disposal of halons or manufacturing of halon blends is conducted in the application area.	☐ Yes ☒ No ☐ N/A
XI.	**Miscellaneous**		
	A.	**Requirements Reference Tables (RRT) and Flowcharts**	
	1.	The application area contains units that are potentially subject to a regulation for which the TCEQ has not developed an RRT and flowchart.	☒ Yes ☐ No

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XI.	**Miscellaneous (continued)**		
	B.	**Forms**	
♦	1.	The application area contains units that are potentially subject to a regulation for which the TCEQ has not developed a unit attribute form. *If the response to Question XI.B.1 is "No" or "N/A," go to Section XI.C.*	☒ Yes ☐ No ☐ N/A
♦	2.	Provide the Part and Subpart designation for the federal rule(s) or the Chapter, Subchapter, and Division designation for the State regulation(s) in the space provided below.	
40 CFR Part 63, Subpart YY – RTR Amendments 40 CFR Part 63, FFFF – RTR Amendments			
	C.	**Emission Limitation Certifications**	
♦	1.	The application area includes units for which federally enforceable emission limitations have been established by certification.	☒ Yes ☐ No
	D.	**Alternative Means of Control, Alternative Emission Limitation or Standard, or Equivalent Requirements**	
	1.	The application area is located at a site that is subject to a site-specific requirement of the state implementation plan (SIP).	☐ Yes ☒ No
	2.	The application area includes units located at the site that are subject to a site-specific requirement of the SIP.	☐ Yes ☒ No
	3.	The application area includes units which demonstrate compliance by using an alternative means of control, alternative emission limitation or standard or equivalent requirements approved by the EPA Administrator. *If the response to Question XI.D.3 is "Yes," please include a copy of the approval document with the application.*	☐ Yes ☒ No
	4.	The application area includes units which demonstrate compliance by using an alternative means of control, alternative emission limitation or standard or equivalent requirements approved by the TCEQ Executive Director. *If the response to Question XI.D.4 is "Yes," please include a copy of the approval document with the application.*	☒ Yes ☐ No

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XI.	Miscellaneous (continued)	
	E. Title IV - Acid Rain Program	
1.	The application area includes emission units subject to the Acid Rain Program (ARP), including the Opt-In Program.	☐ Yes ☒ No
2.	The application area includes emission units qualifying for the new unit exemption under 40 CFR § 72.7.	☐ Yes ☒ No
3.	The application area includes emission units qualifying for the retired unit exemption under 40 CFR § 72.8.	☐ Yes ☒ No
	F. 40 CFR Part 97, Subpart EEEEE - Cross-State Air Pollution Rule (CSAPR) NO_X Ozone Season Group 2 Trading Program	
1.	The application area includes emission units subject to the requirements of the CSAPR NO_X Ozone Season Group 2 Trading Program. *If the response to Question XI.F.1 is "No," go to Question XI.F.7.*	☐ Yes ☒ No
2.	The application area includes units that are complying with the CEMS requirements of 40 CFR Part 75, Subpart H for NO_X and heat input.	☐ Yes ☐ No
3.	The application area includes gas or oil-fired units that are complying with the CEMS requirements of 40 CFR Part 75, Subpart H for NO_X, and the monitoring requirements of 40 CFR Part 75, Appendix D for heat input.	☐ Yes ☐ No
4.	The application area includes gas or oil-fired peaking units that are complying with the monitoring requirements of 40 CFR Part 75, Appendix E for NO_X, and the monitoring requirements of 40 CFR Part 75, Appendix D for heat input.	☐ Yes ☐ No
5.	The application area includes gas or oil-fired units that are complying with the Low Mass Emissions monitoring requirements of 40 CFR § 75.19 for NO_X and heat input.	☐ Yes ☐ No
6.	The application area includes units that are complying with EPA-approved alternative monitoring system requirements of 40 CFR Part 75, Subpart E for NO_X and heat input.	☐ Yes ☐ No
7.	The application area includes emission units that qualify for the CSAPR NO_X Ozone Season Group 2 retired unit exemption.	☐ Yes ☒ No

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XI.	Miscellaneous (continued)	
G.	**40 CFR Part 97, Subpart FFFFF - Texas SO_2 Trading Program**	
1.	The application area includes emission units complying with the requirements of the Texas SO_2 Trading Program. *If the response to Question XI.G.1 is "No," go to Question XI.G.6.*	☐ Yes ☒ No
2.	The application area includes units that are complying with the CEMS requirements of 40 CFR Part 75, Subpart B for SO_2 and 40 CFR Part 75, Subpart H for heat input.	☐ Yes ☐ No
3.	The application area includes gas or oil-fired units that are complying with the monitoring requirements of 40 CFR Part 75, Appendix D for SO_2 and heat input.	☐ Yes ☐ No
4.	The application area includes gas or oil-fired units that are complying with the Low Mass Emissions monitoring requirements of 40 CFR § 75.19 for SO_2 and heat input.	☐ Yes ☐ No
5.	The application area includes units that are complying with EPA-approved alternative monitoring system requirements of 40 CFR Part 75, Subpart E for SO_2 and heat input.	☐ Yes ☐ No
6.	The application area includes emission units that qualify for the Texas SO_2 Trading Program retired unit exemption.	☐ Yes ☒ No
H.	**Permit Shield (SOP Applicants Only)**	
1.	A permit shield for negative applicability entries on Form OP-REQ2 (Negative Applicable Requirement Determinations) is being requested or already exists in the permit.	☒ Yes ☐ No

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XI.	**Miscellaneous (continued)**		
	I.	**GOP Type (Complete this section for GOP applications only)**	
♦	1.	The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under GOP No. 511 - Oil and Gas General Operating Permit for Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Ellis, Fort Bend, Galveston, Hardin, Harris, Jefferson, Johnson, Kaufman, Liberty, Montgomery, Orange, Parker, Rockwall, Tarrant, Waller, and Wise Counties.	☐ Yes ☐ No
♦	2.	The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under GOP No. 512 - Oil and Gas General Operating Permit for Gregg, Nueces, and Victoria Counties.	☐ Yes ☐ No
♦	3.	The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under GOP No. 513 - Oil and Gas General Operating Permit for Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties.	☐ Yes ☐ No
♦	4.	The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under GOP No. 514 - Oil and Gas General Operating Permit for All Texas Counties Except Aransas, Bexar, Brazoria, Calhoun, Chambers, Collin, Dallas, Denton, El Paso, Ellis, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Johnson, Kaufman, Liberty, Matagorda, Montgomery, Nueces, Orange, Parker, Rockwall, San Patricio, Tarrant, Travis, Victoria, Waller, and Wise County.	☐ Yes ☐ No
♦	5.	The application area is applying for initial issuance, revision, or renewal of a solid waste landfill general operating permit under GOP No. 517 - Municipal Solid Waste Landfill general operating permit.	☐ Yes ☐ No
	J.	**Title 30 TAC Chapter 101, Subchapter H**	
♦	1.	The application area is located in a nonattainment area. *If the response to Question XI.J.1 is "No," go to Question XI.J.3.*	☐ Yes ☒ No
♦	2.	The applicant has or will generate emission reductions to be credited in the TCEQ Emissions Banking and Trading Program.	☐ Yes ☐ No ☐ N/A
♦	3.	The applicant has or will generate discrete emission reductions to be credited in the TCEQ Emissions Banking and Trading Program.	☐ Yes ☒ No ☐ N/A

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♦ For GOP applications, answer ONLY these questions unless otherwise directed.

XI.	**Miscellaneous (continued)**		
	J.	**Title 30 TAC Chapter 101, Subchapter H (continued)**	
♦	4.	The application area is located at a site in the Houston/Galveston/Brazoria nonattainment area where the facilities have a collective uncontrolled design capacity to emit 10 tpy or more of NO_X. *If the response to Question XI.J.4 is "Yes," go to Question XI.J.6.*	☐ Yes ☒ No
♦	5.	The application area is located at a site in the Houston/Galveston/Brazoria nonattainment area where the facilities previously had a collective uncontrolled design capacity to emit 10 tpy or more of NO_X and is subject to 101.351(c).	☐ Yes ☒ No
	6.	The application area includes an electric generating facility permitted under 30 TAC Chapter 116, Subchapter I.	☐ Yes ☒ No
♦	7.	The application area is located at a site in the Houston/Galveston/Brazoria nonattainment area and the site has a potential to emit more than 10 tpy of highly reactive volatile organic compounds (HRVOC) from facilities covered under 30 TAC Chapter 115, Subchapter H, Divisions 1 and 2.	☐ Yes ☒ No
♦	8.	The application area is located at a site in the Houston/Galveston/Brazoria nonattainment area, the site has a potential to emit 10 tpy or less of HRVOC from covered facilities and the applicant is opting to comply with the requirements of 30 TAC Chapter 101, Subchapter H, Division 6, Highly Reactive VOC Emissions Cap and Trade Program.	☐ Yes ☒ No
	K.	**Periodic Monitoring**	
♦	1.	The applicant or permit holder is submitting at least one periodic monitoring proposal described on Form OP-MON in this application. *If the response to Question XI.K.1 is "Yes," go to Section XI.L.*	☐ Yes ☒ No
♦	2.	The permit currently contains at least one periodic monitoring requirement. *If the responses to Questions XI.K.1 and XI.K.2 are both "No," go to Section XI.L.*	☒ Yes ☐ No
♦	3.	All periodic monitoring requirements are being removed from the permit with this application.	☐ Yes ☒ No

Application Area-Wide Applicability Determinations and General Information
Form OP-REQ1 (Page 84)
Federal Operating Permit Program
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
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For SOP applications, answer ALL questions unless otherwise directed.
♦ For GOP applications, answer ONLY these questions unless otherwise directed.

XI.	**Miscellaneous (continued)**		
	L.	**Compliance Assurance Monitoring**	
♦	1.	The application area includes at least one unit that does not meet the CAM exemptions in 40 CFR § 64.2(b) for all applicable requirements that it is subject to, and the unit has a pre-control device potential to emit greater than or equal to the amount in tons per year required in a site classified as a major source. *If the response to Question XI.L.1 is "No," go to Section XI.M.*	☒ Yes ☐ No
♦	2.	The unit or units defined by XI.L.1 are using a control device to comply with an applicable requirement. *If the response to Question XI.L.2 is "No," go to Section XI.M.*	☒ Yes ☐ No
♦	3.	The permit holder has submitted a CAM proposal on Form OP-MON in a previous application.	☒ Yes ☐ No
♦	4.	The owner/operator or permit holder is submitting a CAM proposal on Form OP-MON according to the deadlines for submittals in 40 CFR § 64.5 in this application. *If the responses to Questions XI.L.3 and XI.L.4 are both "No," go to Section XI.M.*	☐ Yes ☒ No
	5.	The owner/operator or permit holder is submitting a CAM implementation plan and schedule to be incorporated as enforceable conditions in the permit.	☐ Yes ☒ No
	6.	Provide the unit identification numbers for the units for which the applicant is submitting a CAM implementation plan and schedule in the space below.	
♦	7.	At least one unit defined by XI.L.1 and XI.L.2 is using a CEMS, COMS or PEMS meeting the requirements of 40 CFR § 64.3(d)(2).	☐ Yes ☒ No
♦	8.	All units defined by XI.L.1 and XI.L.2 are using a CEMS, COMS or PEMS meeting the requirements of 40 CFR § 64.3(d)(2). *If the response to Question XI.L.8 is "Yes," go to Section XI.M.*	☐ Yes ☒ No

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For SOP applications, answer ALL questions unless otherwise directed.
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XI.	**Miscellaneous (continued)**		
	L.	**Compliance Assurance Monitoring (continued)**	
♦	9.	At least one of the CAM proposals as described by question XI.L.3 or XI.L.4 addresses particulate matter, and the emission unit has a capture system as defined in 40 CFR §64.1.	☐ Yes ☒ No
♦	10.	At least one of the CAM proposals as described by question XI.L.3 or XI.L.4 addresses VOC, and the emission unit has a capture system as defined in 40 CFR §64.1.	☒ Yes ☐ No
♦	11.	At least one of the CAM proposals as described by question XI.L.3 or XI.L.4 addresses a regulated pollutant other than particulate matter or VOC, and the emission unit has a capture system as defined in 40 CFR §64.1.	☐ Yes ☒ No
♦	12.	The control device in the CAM proposal as described by question XI.L.3 or XI.L.4 has a bypass.	☐ Yes ☒ No
	M.	**Title 30 TAC Chapter 113, Subchapter D, Division 5 - Emission Guidelines and Compliance Times**	
♦	1.	The application area includes at least one air curtain incinerator that commenced construction on or before December 9, 2004. *If the response to Question XI.M.1 is "No," or "N/A," go to Section XII.*	☐ Yes ☐ No ☒ N/A
♦	2.	All air curtain incinerators constructed on or before December 9, 2004 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ Yes ☐ No
XII.	**New Source Review (NSR) Authorizations**		
	A.	**Waste Permits with Air Addendum**	
♦	1.	The application area includes a Municipal Solid Waste Permit or an Industrial Hazardous Waste with an Air Addendum. *If the response to XII.A.1 is "Yes," include the waste permit numbers and issuance date in Section XII.J.*	☐ Yes ☒ No

Date	Permit No.	Regulated Entity No.
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XII.	**New Source Review (NSR) Authorizations (continued)**		
	B.	**Air Quality Standard Permits**	
♦	1.	The application area includes at least one Air Quality Standard Permit NSR authorization. *If the response to XII.B.1 is "No," go to Section XII.C. If the response to XII.B.1 is "Yes," be sure to include the standard permit's registration numbers in Section XII.H and answer XII.B.2 - B.16 as appropriate.*	☒ Yes ☐ No
♦	2.	The application area includes at least one "State Pollution Control Project" Air Quality Standard Permit NSR authorization under 30 TAC § 116.617.	☐ Yes ☒ No
♦	3.	The application area includes at least one non-rule Air Quality Standard Permit for Pollution Control Projects NSR authorization.	☒ Yes ☐ No
♦	4.	The application area includes at least one "Installation and/or Modification of Oil and Gas Facilities" Air Quality Standard Permit NSR authorization under 30 TAC § 116.620.	☐ Yes ☒ No
♦	5.	The application area includes at least one non-rule Air Quality Standard Permit for Oil and Gas Handling and Production Facilities NSR authorization.	☐ Yes ☒ No
♦	6.	The application area includes at least one "Municipal Solid Waste Landfill" Air Quality Standard Permit NSR authorization under 30 TAC § 116.621.	☐ Yes ☒ No
♦	7.	The application area includes at least one "Municipal Solid Waste Landfill Facilities and Transfer Stations" Standard Permit authorization under 30 TAC Chapter 330, Subchapter U.	☐ Yes ☒ No
	8.	The application area includes at least one "Concrete Batch Plant" Air Quality Standard Permit NSR authorization.	☐ Yes ☒ No
	9.	The application area includes at least one "Concrete Batch Plant with Enhanced Controls" Air Quality Standard Permit NSR authorization.	☐ Yes ☒ No
	10.	The application area includes at least one "Hot Mix Asphalt Plant" Air Quality Standard Permit NSR authorization.	☐ Yes ☒ No

Date	Permit No.	Regulated Entity No.
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XII.	**New Source Review (NSR) Authorizations (continued)**		
	B.	**Air Quality Standard Permits (continued)**	
♦	11.	The application area includes at least one "Rock Crusher" Air Quality Standard Permit NSR authorization.	☐ Yes ☒ No
♦	12.	The application area includes at least one "Electric Generating Unit" Air Quality Standard Permit NSR authorization. *If the response to XII.B.12 is "No," go to Question XII.B.15.*	☐ Yes ☒ No
♦	13.	For purposes of "Electric Generating Unit" Air Quality Standard Permit, the application area is located in the East Texas Region.	☐ Yes ☐ No
♦	14.	For purposes of "Electric Generating Unit" Air Quality Standard Permit, the application area is located in the West Texas Region.	☐ Yes ☐ No
♦	15.	The application area includes at least one "Boiler" Air Quality Standard Permit NSR authorization.	☐ Yes ☒ No
♦	16.	The application area includes at least one "Sawmill" Air Quality Standard Permit NSR authorization.	☐ Yes ☒ No
	C.	**Flexible Permits**	
	1.	The application area includes at least one Flexible Permit NSR authorization.	☐ Yes ☒ No
	D.	**Multiple Plant Permits**	
	1.	The application area includes at least one Multi-Plant Permit NSR authorization.	☐ Yes ☒ No

Date	Permit No.	Regulated Entity No.
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XII. NSR Authorizations (Attach additional sheets if necessary for sections XII.E-J.)

E. PSD Permits and PSD Major Pollutants

Permit No.	Issuance Date	Pollutant(s):	Permit No.	Issuance Date	Pollutant(s):
PSDTX1383M1	02/15/2022	VOC, NO_x, CO, PM, PM_{10}, CO2e			

If PSD Permits are held for the application area, please complete the Major NSR Summary Table located under the Technical Forms heading at: www.tceq.texas.gov/permitting/air/titlev/site/site_experts.html.

F. Nonattainment (NA) Permits and NA Major Pollutants

Permit No.	Issuance Date	Pollutant(s):	Permit No.	Issuance Date	Pollutant(s):

If NA Permits are held for the application area, please complete the Major NSR Summary Table located under the Technical Forms heading at: www.tceq.texas.gov/permitting/air/titlev/site/site_experts.html.

G. NSR Authorizations with FCAA § 112(g) Requirements

NSR Permit No.	Issuance Date	NSR Permit No.	Issuance Date	NSR Permit No	Issuance Date
107518	02/15/2022				

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

For SOP applications, answer ALL questions unless otherwise directed.
♦ For GOP applications, answer ONLY these questions unless otherwise directed.

XII. NSR Authorizations (continued) - (Attach additional sheets if necessary for sections XII.E-J.)

♦ **H. Title 30 TAC Chapter 116 Permits, Special Permits, Standard Permits, Other Authorizations (Other Than Permits By Rule, PSD Permits, NA Permits) for the Application Area**

Authorization No.	Issuance Date	Authorization No.	Issuance Date	Authorization No.	Issuance Date
167828	02/18/2022				

♦ **I. Permits by Rule (30 TAC Chapter 106) for the Application Area**
A list of selected Permits by Rule (previously referred to as standard exemptions) that are required to be listed in the FOP application is available in the instructions.

PBR No.	Version No./Date	PBR No.	Version No./Date	PBR No.	Version No./Date
106.261	11/01/2003				
106.262	11/01/2003				
106.263	11/01/2001				
106.371	09/04/2000				
106.472	09/04/2000				
106.476	09/04/2000				

♦ **J. Municipal Solid Waste and Industrial Hazardous Waste Permits with an Air Addendum**

Permit No.	Issuance Date	Permit No.	Issuance Date	Permit No.	Issuance Date

APPENDIX C APPLICABLE REQUIREMENTS DETERMINATION FORMS OP-REQ2 AND OP-REQ3

Form OP-REQ2
Negative Applicable/Superseded Requirement Determinations
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit AI	Revision No.	Unit/Group/Process ID No.	Unit/Group/Process Applicable Form	Potentially Applicable Regulatory Name	Negative Applicability/Superseded Requirement Citation	Negative Applicability/Superseded Requirement Reason
A	1	T-1152	OP-UA3, OP-REQ2	NSPS Kb	§ 60.110b(a)	Storage vessel capacity is less than 75 m^3.
A	2	T-1253	OP-UA3, OP-REQ2	NSPS Kb	§ 60.110b(a)	Storage vessel capacity is less than 75 m^3.
A	3	T-2451	OP-UA3, OP-REQ2	NSPS Kb	§ 60.110b(a)	Storage vessel capacity is less than 75 m^3.

Applicable Requirements Summary

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Federal Operating Permit Program

Table 1a: Additions

Date:	02/03/2025	**Regulated Entity No.:**	RN100218937	**Permit No.:**	O4165
Company Name:	Formosa Plastics Corporation, Texas	**Area Name:**	Olefins 3 and Propane Dehydrogenation (PDH) Plant		

Revision No.	Unit / Group / Process ID No.	Unit / Group / Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
4	GRP-ESAF	OP-UA7 OP-REQ3	63YY-8 Post EMACT RTR Flare Requirements For Elevated Steam-Assisted Flares (ESAFs) - Also see more detailed supporting citations in Appendix D1	HAPS	MACT YY	63.1103(e)(3) - Table 7(d) [GD]63.1103(e)(4) [GD]63.1104 63.1105(a)(5) [GD]63.670 As per AMOC No. 213 issued by TCEQ on September 23, 2022, the effective date for SOP Index No. 63YY-8 requirements is July 6, 2024. More detailed regulatory citations for SOP Index 63YY-8 are provided in Appendix D1
5	OL3-MV	OP-REQ3	63YY-9 Post EMACT RTR Maintenance Vent (MV) Requirements	HAPS	MACT YY	[GD]63.1103(e)(5) The effective date for SOP Index No. 63YY-9 (EMACT post- RTR Maintenance Vent (MV) requirements) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-9 are provided in Appendix D2

Applicable Requirements Summary

OP-REQ3 (Page 1)

Federal Operating Permit Program

Table 1a: Additions

Date:	02/03/2025	**Regulated Entity No.:**	RN100218937	**Permit No.:**	O4165
Company Name:	Formosa Plastics Corporation, Texas	**Area Name:**	Olefins 3 and Propane Dehydrogenation (PDH) Plant		

Revision No.	Unit / Group / Process ID No.	Unit / Group / Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
6	OL3-BL	OP-REQ3	63YY-10 Post EMACT RTR Bypass Line (BL) Requirements	HAPS	MACT YY	63.1103(e)(3) - Table 7(i) 63.1106(e)(6) 63.1103(e)(6)(i) 63.1103(e)(6)(ii) The effective date for SOP Index No. 63YY-10 (EMACT post- RTR Bypass Line (BL) requirements) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-10 are provided in Appendix D3
7	OL3-SVD	OP-REQ3	63YY-11 Post EMACT RTR Storage Vessel Degassing (SVD) Requirements	HAPS	MACT YY	[GD]63.1103(e)(10) The effective date for SOP Index No. 63YY-11 (EMACT post- RTR Storage Vessel Degassing (SVD) requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-11 are provided in Appendix D4

Applicable Requirements Summary

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Table 1a: Additions

Date:	02/03/2025	**Regulated Entity No.:**	RN100218937	**Permit No.:**	O4165
Company Name:	Formosa Plastics Corporation, Texas	**Area Name:**	Olefins 3 and Propane Dehydrogenation (PDH) Plant		

Revision No.	Unit / Group / Process ID No.	Unit / Group / Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
8	OL3-APRD	OP-REQ3	63YY-12 Post EMACT RTR Atmospheric Pressure Relief Device (APRD) Requirements	HAPS	MACT YY	[GD]63.1107(h) The effective date for SOP Index No. 63YY-12 (EMACT post- RTR APRD requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-12 are provided in Appendix D5
9	GRP-OL3DK	OP-REQ3	63YY-13 Post EMACT RTR Furnace Decoking and Valve Inspection (FDVI) Requirements	HAPS	MACT YY	63.1103(e)(3) - Table 7(j) 63.1103(e)(7)(i)(A),(B), (e)(7)(iii), (e)(7)(iv), (e)(7),(v). The effective date for SOP Index No. 63YY-13 (EMACT post- RTR Furnace Decoking and Valve Inspection (FDVI) requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-13 are provided in Appendix D6

Applicable Requirements Summary

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Federal Operating Permit Program

Table 1a: Additions

Date:	02/03/2025	**Regulated Entity No.:**	RN100218937	**Permit No.:**	O4165
Company Name:	Formosa Plastics Corporation, Texas	**Area Name:**	Olefins 3 and Propane Dehydrogenation (PDH) Plant		

Revision No.	Unit / Group / Process ID No.	Unit / Group / Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
10	OL3-CTWR	OP-REQ3	63XX-1 Post EMACT RTR Cooling Water Tower Heat Exchange System (CWTHES) Requirements	HAPS	MACT YY and MACT XX	63.1103(e)(3) - Table 7(h) 63.1085(e) 63.1085(f) [GD]63.1086(e) [GD]63.1087(c) 63.1087(d) [GD]63.1088(d) The effective date for SOP Index No. 63XX-1 (EMACT post- RTR Cooling Water Tower Heat Eschange Systems (CWTHES) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63XX-1 are provided in Appendix D7
11	OL3-EMPU	OP-REQ3	63YY-14 Post EMACT RTR for Ethylene Manufacturing Process Units (EMPUs) Startup, Shutdown, Malfunction and Maintenance Requirements, and Other Miscellaneous EMPU-wide Requirements	HAPS	MACT YY	63.1103(e)(3) 63.1103(e)(9) [GD]63.1108(a) [GD]63.1108(b) The effective date for SOP Index No. 63YY-14 (EMACT post- RTR EMPU-wide requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-14 are provided in Appendix D8

Applicable Requirements Summary

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Federal Operating Permit Program

Table 1b: Additions

Date:	02/03/2025	**Regulated Entity No.:**	RN100218937	**Permit No.:**	O4165
Company Name:	Formosa Plastics Corporation, Texas	**Area Name:**	Olefins 3 and Propane Dehydrogenation (PDH) Plant		

Revision No.	Unit / Group / Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
4	GRP-ESAF	63YY-8	HAPS	[GD]63.1103(e)(4) [GD]63.670 [GD]63.671 As per AMOC No. 213 issued by TCEQ on September 23, 2022, the effective date for SOP Index No. 63YY-7 requirements is July 6, 2024. More detailed regulatory citations for SOP Index 63YY-8 are provided in Appendix D1	[GD]63.1104(l) [GD]63.1109(e) [G]63.670 As per AMOC No. 213 issued by TCEQ on September 23, 2022, the effective date for SOP Index No. 63YY-7 requirements is July 6, 2024. More detailed regulatory citations for SOP Index 63YY-8 are provided in Appendix D1	[GD]63.1104(m) [GD]63.1110(e)(4) . As per AMOC No. 213 issued by TCEQ on September 23, 2022, the effective date for SOP Index No. 63YY-7 requirements is July 6, 2024. More detailed regulatory citations for SOP Index 63YY-7 are provided in Appendix D1
5	OL3-MV	63YY-9	HAPS	[GD]63.1103(e)(5) The effective date for SOP Index No. 63YY-9 (EMACT post- RTR Maintenance Vent (MV) requirements) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-9 are provided in Appendix D2	[GD]63.1109(f) The effective date for SOP Index No. 63YY-9 (EMACT post- RTR Maintenance Vent (MV) requirements) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-9 are provided in Appendix D2	[GD]63.1110(e)(5) The effective date for SOP Index No. 63YY-9 (EMACT post- RTR Maintenance Vent (MV) requirements) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-9 are provided in Appendix D2

Applicable Requirements Summary

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Federal Operating Permit Program

Table 1b: Additions

Date:	02/03/2025	**Regulated Entity No.:**	RN100218937	**Permit No.:**	O4165
Company Name:	Formosa Plastics Corporation, Texas	**Area Name:**	Olefins 3 and Propane Dehydrogenation (PDH) Plant		

Revision No.	Unit / Group / Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
6	OL3-BL	63YY-10	HAPS	NA The effective date for SOP Index No. 63YY-10 (EMACT post- RTR Bypass Line (BL) requirements) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-10 are provided in Appendix D3	63.1109(g) The effective date for SOP Index No. 63YY-10 (EMACT post- RTR Bypass Line (BL) requirements) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-10 are provided in Appendix D3	63.1110(e)(6) The effective date for SOP Index No. 63YY-10 (EMACT post- RTR Bypass Line (BL) requirements) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-10 are provided in Appendix D3
7	OL3-SVD	63YY-11	HAPS	[GD]63.1103(e)(10) The effective date for SOP Index No. 63YY-11 (EMACT post- RTR Storage Vessel Degassing (SVD} requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-11 are provided in Appendix D4	[GD]63.1103(e)(10) The effective date for SOP Index No. 63YY-11 (EMACT post- RTR Storage Vessel Degassing (SVD} requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-11 are provided in Appendix D4	[GD]63.1103(e)(10) The effective date for SOP Index No. 63YY-11 (EMACT post- RTR Storage Vessel Degassing (SVD} requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-11 are provided in Appendix D4

Applicable Requirements Summary
OP-REQ3 (Page 2)
Federal Operating Permit Program

Table 1b: Additions

Date:	02/03/2025	**Regulated Entity No.:**	RN100218937	**Permit No.:**	O4165
Company Name:	Formosa Plastics Corporation, Texas	**Area Name:**	Olefins 3 and Propane Dehydrogenation (PDH) Plant		

Revision No.	Unit / Group / Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
8	OL3-APRD	63-YY12	HAPS	[GD]63.1107(h)(3) The effective date for SOP Index No. 63YY-12 (EMACT post- RTR APRD requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-12 are provided in Appendix D5	[GD]63.1109(i) The effective date for SOP Index No. 63YY-12 (EMACT post- RTR APRD requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-12 are provided in Appendix D5	[GD]63.1110(e)(8) The effective date for SOP Index No. 63YY-12 (EMACT post- RTR APRD requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-12 are provided in Appendix D5
9	GRP-OL3DK	63YY-13	HAPS	63.1103(e)(3) - Table 7(j) 63.1103(e)(7)(i)(A),(B), (e)(7)(iii), (e)(7)(iv), (e)(7),(v). The effective date for SOP Index No. 63YY-13 (EMACT post- RTR Furnace Decoking and Valve Inspection (FDVI) requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-13 are provided in Appendix D6	{GD}63.1109(h) The effective date for SOP Index No. 63YY-13 (EMACT post- RTR Furnace Decoking and Valve Inspection (FDVI) requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-13 are provided in Appendix D6	{GD}63.1110(e)(7) The effective date for SOP Index No. 63YY-13 (EMACT post- RTR Furnace Decoking and Valve Inspection (FDVI) requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-13 are provided in Appendix D6

Applicable Requirements Summary

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Table 1b: Additions

Date:	02/03/2025	**Regulated Entity No.:**	RN100218937	**Permit No.:**	O4165
Company Name:	Formosa Plastics Corporation, Texas	**Area Name:**	Olefins 3 and Propane Dehydrogenation (PDH) Plant		

Revision No.	Unit / Group / Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
10	OL3-CTWR	63XX-1	HAPS	63.1103(e)(3) - Table 7(h) 63.1085(e) 63.1085(f) [GD]63.1086(e) [GD]63.1087(c) 63.1087(d) [GD]63.1088(d) The effective date for SOP Index No. 63XX-1 (EMACT post- RTR Cooling Water Tower Heat Eschange Systems (CWTHES) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63XX-1 are provided in Appendix D7	[GD]63.1089(d) The effective date for SOP Index No. 63XX-1 (EMACT post- RTR Cooling Water Tower Heat Eschange Systems (CWTHES) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63XX-1 are provided in Appendix D7	63.1090 [GD]63.1090(f) The effective date for SOP Index No. 63XX-1 (EMACT post- RTR Cooling Water Tower Heat Eschange Systems (CWTHES) is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63XX-1 are provided in Appendix D7
11	OL3-EMPU	63YY-14	HAPS	63.1103(e)(3) 63.1103(e)(9) [GD]63.1108(a) [GD]63.1108(b) The effective date for SOP Index No. 63YY-14 (EMACT post- RTR EMPU-wide requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-14 are provided in Appendix D8	[GD]63.1111(c) The effective date for SOP Index No. 63YY-14 (EMACT post- RTR EMPU-wide requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-14 are provided in Appendix D8	[GD]63.1110 63.1111(c)(2) The effective date for SOP Index No. 63YY-14 (EMACT post- RTR EMPU-wide requirements is July 6, 2023 as specified at 63.1102(c). More detailed regulatory citations for SOP Index 63YY-14 are provided in Appendix D8

APPENDIX D SUPPORTING REGULATORY CITATION DOCUMENTATION FOR FORM OP-REQ3

Appendix D - Organization of New EMACT RTR Regulatory Citation Sections

SOP Index Numbers	OP-SUMR Table 2 Group IDs	Unit IDs	SOP Index Number Description	Application Appendix D Section	OP-2 Table 2 Revision Numbers
Master	All	All	All	D-Master	4 - 11
63YY-8	GRP-ESAF	OL3FLRA/B/C	MACT YY Post-RTR Requirements for Elevated Steam-Assisted Flares (ESAFs)	D1	4
63YY-9	NA	OL3-MV	MACT YY Post-RTR Maintenance Vent (MV) Requirements	D2	5
63YY-10	NA	OL3-BL	MACT YY Post-RTR Bypass Line (BL) Requirements	D3	6
63YY-11	NA	OL3-SVD	MACT YY Post-RTR Storage Vessel Degassing (SVD) Requirements	D4	7
63YY-12	NA	OL3-APRD	MACT YY Post-RTR Atmospheric Pressure Relief Device (APRD) Requirements	D5	8
63YY-13	GRP-OL3DK	OL3-DK1 OL3-DK2	MACT YY Post RTR Requirements for C=C Furnace Decoking and Valve Inspections (FDVI)	D6	9
63XX-1	NA	OL3-CTWR	MACT XX Post-RTR Heat Exchange System Requirements	D7	10
63YY-14	NA	OL3-EMPU	MACT YY Post-RTR for Ethylene Manufacturing Process Unit (EMPU) Startup, Shutdown, Malfuction and Maintenance Requirements, and Other Miscellaneous EMPU-wide Requirements	D8	11

Appendix D-Master - Master List of New EMACT RTR Regulatory Citations

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
EMPU	NA	OL3-EMPU	63.1103(e)(3)	Comply with MACT YY Table 7 for SVs, PVs, TRs, fugitives, wastes, HESs, BLs, and DC	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1103(e)(3) - Table 7(d)**	PV flow ≥ 0.011 scmm & OHAP > 50 ppmvd, use flare meeting post-RTR EMACT requirements	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1103(e)(3) - Table 7(h)	For heat exchange systems in OHAP service comply with 40 CFR 63 Subpart XX requirements	Requirement
Bypass Lines	NA	OL3-BL	63.1103(e)(3) - Table 7(i)	Comply with bypass line requirements in 63.1103(e)(6) and (9)	Requirement
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(3) - Table 7(j)	Comply with ethylene cracking funrance decoking requirements in 63.1103(e)(7) and (8)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1103(e)(4)**	Flares – comply 63.670 and 63.671 (with exceptions)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(ii)	Flare Management Plan (FMP) instead of 63.670(o)(2)(i)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(iii)	Report - Submit FMP via CEDRI	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(iv)	Comply with flare tip velocity requirement at all times [63.670(o)(3)(ii) does not apply]	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(v)	In 63.670 and 671, "petroleum refinery" = "ethylene production unit"	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(vi)	In 63.670 and 671, "refinery" does not apply	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(ix)	Monitoring - Calibration error for NHV must be < 10% in daily and quarterly audits	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(xii)	Monitoring In 63.670(b)&(g), "pilot flame" = "pilot flame or flare flame"	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(xiii)	Rules for 15-min block times for flare tip velocity and combustion zone operating limits	Monitoring/Testing
Maintenance Vents	NA	OL3-MV	**63.1103(e)(5)**	MV – Requirement to designate Maintenance Vents (MVs)	Requirement
Maintenance Vents	NA	OL3-MV	63.1103(e)(5)(i)	MV – De-inventory equipment to flare before venting to atmosphere via MV	Requirement
Maintenance Vents	NA	OL3-MV	63.1103(e)(5)(i)(A)	MV – OK to open equipment if LEL < 10% measured in situ	Requirement
Maintenance Vents	NA	OL3-MV	63.1103(e)(5)(i)(B)	MV – No in situ LEL meter – reduce P to < 5 psig – no active venting until LEL < 10%	Requirement
Maintenance Vents	NA	OL3-MV	63.1103(e)(5)(i)(C)	MV – OK to open equipment if it contains < 50 lb VOC	Requirement
Maintenance Vents	NA	OL3-MV	63.1103(e)(5)(i)(D)	MV – Option to reduce P to ? 2 psig and install/remove blind flange	Requirement
Maintenance Vents	NA	OL3-MV	63.1103(e)(5)(ii)	MV – If LEL monitor used, must follow manufacturers calibration and maintenance procedures	Requirement
Maintenance Vents	NA	OL3-MV	63.1103(e)(5)(iii)	MV – If 50 lb VOC option is used, engineering study must be performed	Requirement
Bypass Lines	NA	OL3-BL	63.1103(e)(6)	Bypass Lines (BL) – any bypass of emissions from control device to atmosphere is violation	Requirement
Bypass Lines	NA	OL3-BL	63.1103(e)(6)(i)	BL – possible exemptions	Requirement
Bypass Lines	NA	OL3-BL	63.1103(e)(6)(ii)	BL – capped or blinded open-ended lines and double valves lines not subject to BL requirements	Requirement
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)	Decoking (DC) – use at least two specified control methods in (ii) through (v)	Requirement
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(i)	DC – Daily inspection of firebox burners	Requirement
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(i)(A)	DC - If shutdown causes emissions > delaying repair, fix during next decoking or shutdown	Requirement
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(i)(B)	DC – If shutdown causes emissions < delaying repair, shut down furnace and fix	Requirement
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(ii)	DC – Monitor CO2 concentration to determine completion of DC cycle	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(iii)	DC – Monitor T at radiant tubes outlet to ensure tubes don't become too hot	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(iv)	DC – Monitor - After docking, verify decoke air no longer being added before restarting furnace	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(v)	DC – Monitor - After decoking, inject material in feed or steam to reduce coke formation	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(8)	IVI – Monitor - Conduct furnace isolation valve inspections per (i) and (ii)	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(8)(i)	IVI – Monitor - Inspect isolation valve prior to decoking and fix if poor isolation	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(8)(ii)	IVI – Monitor - Inspect isolation valve after decoking and fix if poor isolation	Monitoring/Testing
EMPU	NA	OL3-EMPU	63.1103(e)(9)	SSM – Startup, Shutdown and Malfunction (SSM) exemption removed	Requirement
Storage Vessel Degassing	NA	OL3-SVD	**63.1103(e)(10)**	SVD – Degas until < 10% LEL for any vessel storing a liquid than contains HAP(s)	Requirement
Storage Vessel Degassing	NA	OL3-SVD	63.1103(e)(10)(i)	SVD – Remove liquids as much as practicable prior to Storage Vessel Degassing (SVD)	Requirement
Storage Vessel Degassing	NA	OL3-SVD	63.1103(e)(10)(ii)(A)	SVD – Control SVD emissions of total OHAP by 98% by routing to a flare	Requirement
Storage Vessel Degassing	NA	OL3-SVD	63.1103(e)(10)(ii)(B)	SVD – Control SVD emissions of total OHAP by 98% by routing to a non-flare control device	Requirement
Storage Vessel Degassing	NA	OL3-SVD	63.1103(e)(10)(ii)(C)	SVD – Control SVD emissions of total OHAP by 98% by routing to a fuel gas system or process	Requirement
Storage Vessel Degassing	NA	OL3-SVD	63.1103(e)(10)(iii)	SVD – Maintain records, including site SVD procedures, to show general duty compliance	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1104(a)**	Process vents routed to a Group 1 control device can simply be designated as Group 1 vents	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(b)	Sampling locations identified for TRE determinations	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(c)	Process vent applicability procedures to determine TRE index	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(d)	Limited process vent TRE determination exceptions (should not apply)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(e)	Method to determine TOC or OHAP concentrations	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(f)	Method to determine volumetric flow rate	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(g)	Method for determining vent gas NHV	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(h)	Equation to calculate TOC or OHAP emission rate	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(i)	Method for assessing halogenated vent streams	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(j)	Method for calculating TRE index	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(k)	Method for performing TRE index determinations via engineering assessment	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1104(l)(1)**	Records – TRE index value determination records must be kept	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(l)(2)	Records – maintain record of flow rates used in TRE determinations	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(l)(3)	Records – maintain record of OHAP and TOC concentrations used in TRE determinations	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(l)(4)	Records – maintain record of process changes that change process vent control requirements	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1104(m)(1)**	Reports – in NOCS submittals report info in (l)(1)-(3)	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(m)(2)	Reports – if process change requires PV control change, report within 60 days	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1105(a)(5)**	Transfer racks routed to flare must meet 63.670/671 requirements post-RTR	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	**63.1107(h)**	PRDs – PRDs in OHAP service follow this new section instead of 63.1030 and 63.165	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(1)	PRDs – Except during pressure release, PRDs in gas/vapor OHAP service maintain < 500 ppmv	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(2)	PRDs – PRDs in gas/vapor OHAP service follow (2)(i)-(iii) following a pressure release	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(2)(i)	PRDs – After release (if no rupture disk), monitor within 5 calendar days to show < 500 ppm	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(2)(ii)	PRDs – After release if rupture disk present, replace disk within 5 calendar days	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(2)(iii)	PRDs – If rupture disk only (no PRD) replace disk within 5 calendar days after release	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	**63.1107(h)(3)**	PRDs – Pressure Release Management: follow (3)(i)-(v) for all PRDs in OHAP service	Monitoring/Testing

Appendix D-Master - Master List of New EMACT RTR Regulatory Citations

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(i)	PRDs – Install monitoring system that meets (3)(i)(A)-(C)	Monitoring/Testing
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(i)(A)	PRDs – Monitoring system must identify any pressure release	Monitoring/Testing
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(i)(B)	PRDs – Monitoring system must record time and duration of each pressure release	Monitoring/Testing
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(i)(C)	PRDs – Monitoring system must notify operators of release with various types of monitors	Monitoring/Testing
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)	PRDs – Must apply at least 3 redundant prevention measures to each PRD as per (A)-(E)	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)(A)	PRDs – Option 1: Install flow, temperature, liquid level, pressure indicators	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)(B)	PRDs – Option 2: Document routine inspection/maintenance programs and/or operator training	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)(C)	PRDs – Option 3: Employ inherently safter designs or safety instrumentation systems	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)(D)	PRDs – Option 4: Employ deluge systems	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)(E)	PRDs – Option 5: Install staged release where first release goes to a flare or control device	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(iii)	PRDs – Atmospheric PRD releases require root cause and corrective action analyses and calcs	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(iv)	PRDs – Determine calendar year count of release events for each PRD	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(v)	PRDs – Atmospheric PRD releases are violations if any (v)(A)-(C) conditions are met	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(v)(A)	PRDs – Any PRD release which root cause is operator error or poor maintenance is violation	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(v)(B)	PRDs – Any second PRD release event within 3 calendar years with same root cause/equipment	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(v)(C)	PRDs – Any third release from same PRD within 3 calendar years except for force majeure	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(4)(ii)	PRDs – PRDs routed to control must meet certain MACT SS requirements	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(4)(iii)	PRDs – PRDs to drain system OK if drain system meets certain BWON requirements	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(6)	PRDs – Root cause (RC) & corrective action (CA) analysis no later than 45 days after PRD release	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(6)(i)	PRDs – Single RC/CA analysis OK for 1 event where over 2 PRDs on same equipment release	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(6)(ii)	PRDs – Single RC/CA analysis OK for multiple PRD release event if caused by force majeure	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(6)(iii)	PRDs – Rules for single PRD with multiple release events	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(7)	PRDs – When RC/CA required, CA must be implemented	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(7)(i)	PRDs – Implement CA within 45 days, or document why no CA required	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(7)(ii)	PRDs – If CA requires > 45 days, develop CA plan and implementation schedule	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(7)(iii)	PRDs – Within 45 days, record CA completed to date, and detailed implementation schedule	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(8)	PRDs – Flowing pilot-operated PRDs prohibited	Requirement
EMPU	NA	OL3-EMPU	63.1108(a)(4)(i)	Post RTR, emission limits and parameter ranges apply at all times except when not operating	Requirement
EMPU	NA	OL3-EMPU	63.1108(a)(4)(ii)	General duty to follow good air pollution control practices at all times	Requirement
EMPU	NA	OL3-EMPU	63.1108(a)(6)	Malfunctions shall be corrected as soon as practicable after their occurrence	Requirement
EMPU	NA	OL3-EMPU	63.1108(a)(7)	Operations and maintenance requirements under MACT are enforceable	Requirement
EMPU	NA	OL3-EMPU	63.1108(b)(1)(ii)	Post RTR, there are no longer any excused excursions of CPMS	Monitoring/Testing
EMPU	NA	OL3-EMPU	63.1108(b)(2)	Post RTR no excused excursions of CPMS except non-operation of source per (b)(2)(ii)	Monitoring/Testing
EMPU	NA	OL3-EMPU	63.1108(b)(3)	Must follow acceptable operation and maintenance procedures	Requirement
EMPU	NA	OL3-EMPU	63.1108(b)(4)(i)	Applicability assessments using testing must perform three test runs	Monitoring/Testing
EMPU	NA	OL3-EMPU	63.1108(b)(4)(ii)(B)	Post RTR performance tests must be conducted under representative conditions	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1109(e)**	Flare Records – Post RTR, keep records in (e)(1)-(15) in lieu of old Subpart SS records	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(1)	Flare Records – Record of continuous pilot/flare flame monitoring	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(2)	Flare Records – Record of daily visible emissions (VE) observation per (2)(i)-(iv)	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(2)(i)	Flare Records – Identify all periods when material is being sent to the flare	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(2)(ii)	Flare Records – Rules for recording data when Method 22 VE observations are made	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(2)(iii)	Flare Records – If video use, record all surveillance images with time and date stamps	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(2)(iv)	Flare Records – Record each 2-hr period where VE are observed for more than 5 minutes	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(3)	Flare Records – Record vent flows, steam assist, pressure, temperature, MW flare gas, etc.	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(4)	Flare Records – Record flare vent gas compositions and if calorimeter used NHVvg	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(5)	Flare Records – Record specified operating parameters per 63.670(k)-(n) as applicable	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(6)	Flare Records – Record all periods when monitored parameters outside of specified range	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(7)	Flare Records – Record all periods when flare monitoring not conducted	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(8)	Flare Records – Records required for multi-point pressure assisted flares	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(9)	Flare Records – More records required for multi-point pressure assisted flares	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(10)	Flare Records – More records required for multi-point pressure assisted flares	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(11)	Flare Records – Periods when vent gas flows to flare by no regulated material to flare	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(12)	Flare Records – Records of periods when vent gas flow exceeds flare smokeless design capacity	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(13)	Flare Records – Records required of flare RC/CA conducted per 63.670(o)(3)-(5)	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(14)	Flare Records – More records required of flare RC/CA conducted per 63.670(o)(3)-(5)	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(15)	Flare Records – Records of when CPMS is malfunctioning per 63.10(b)(2)(vi)	Recordkeeping
Maintenance Vents	NA	OL3-MV	**63.1109(f)**	MV Records – For each MV opening, keep records per (f)(1)-(5)	Recordkeeping
Maintenance Vents	NA	OL3-MV	63.1109(f)(1)	MV Records – Maintain SOPs to de-inventory equipment	Recordkeeping
Maintenance Vents	NA	OL3-MV	63.1109(f)(2)	MV Records – Records for in-situ LEL readings > 10%	Recordkeeping
Maintenance Vents	NA	OL3-MV	63.1109(f)(3)	MV Records – Records for P/LEL option where P < 5 psig or LEL >10% and active purging started	Recordkeeping
Maintenance Vents	NA	OL3-MV	63.1109(f)(4)	MV Records – Records of engineering assessment if 50 lb VOC option used on MV	Recordkeeping
Maintenance Vents	NA	OL3-MV	63.1109(f)(5)	MV Records – Records required if < 2 psig and blind flange option is required w/ explanation	Recordkeeping
Bypass Lines	NA	OL3-BL	63.1109(g)	BL Records – Records required for bypass lines	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)	DC Records – Records to be maintained for each decoking (DC) operation	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(1)	DC Records – Record of date/time/results/repairs after firebox inspection	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(1)(i)	DC Records – If burner repair takes > 1 calendar day, the reason for the delay	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(1)(ii)	DC Records – If burner repair takes > 1 calendar day, emissions estimate and justification	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(1)(iii)	DC Records – If burner repair takes > 1 day, date repair completed or schedule for repair	Recordkeeping

Appendix D-Master - Master List of New EMACT RTR Regulatory Citations

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(2)	DC Records – If CO2 monitoring used, record of CO2 readings and monitoring criteria	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(3)	DC Records – If T monitoring used, record of T readings and target T to reduce firing	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(4)	DC Records – If DC air monitoring used, record that decoke air not being added after DC cycle	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(5)	DC Records – If feed or steam material injection used, record that treatment injection occurred	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(6)	DC Records – Record documenting daily DC isolation valve inspection occurred and results	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	**63.1109(i)**	PRD Records – For each PRD subject to PR release management maintain records per (i)(1)-(3)	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(1)	PRD Records – Identify release prevention measures per 63.107(h)(3)(ii)	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(2)	PRD Records – Number releases per calendar year and number root cause was force majeure	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(3)	PRD Records – For each PRD release to atmosphere, keep records per (i)(3)(i)-(iv)	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(3)(i)	PRD Records – Start and end time of each PRD release to atmosphere	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(3)(ii)	PRD Records – Data, assumptions and calculations used to estimate mass OHAP released	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(3)(iii)	PRD Records – PRD release RC/CA analyses and actions with explanations	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(3)(iv)	PRD Records – When CA required, description of CA within 45 days and schedule if not complete	Recordkeeping
EMPU	NA	OL3-EMPU	63.1110(a)	Reports – Submit reports specified in (a)(1)-(8) and (10)	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(4)	Reports - Notification of Compliance Status (NOCS) per 63.1110(d)	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(5)	Reports - Periodic Reports per 63.1110(e)	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(8)	Reports - Submit other reports as specified elsewhere in MACT YY	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(i)	Reports – Post RTR, submit any performance test results as per (a)(10)(i)(A)-(C)	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(i)(A)	Reports – If possible, submit performance test results via CEDRI using EPA's ERT format	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(i)(B)	Reports – If data does not fit ERT, submit such results as alternative file using CEDRI	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(i)(C)	Reports – For CBI, submit performance test results using electronic media labeled CBI	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(ii)	Reports – Post RTR submit NOCS and periodic reports via CEDRI (if template ready)	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)	Reports – Provisions for non-submittal of reports due to CEDRI outage via (a)(10)(iii)(A)-(G)	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(A)	Reports – Must have been precluded from accessing CEDRI and submitting timely report	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(B)	Reports – Outage must have occurred with the period of time 5 business days before deadline	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(C)	Reports – Outage may be either planned or unplanned	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(D)	Reports – Submit notification to EPA ASAP	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(E)	Reports – Contents of required notification report in (E)(1)-(4)	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(F)	Reports – Must accept deadline extension solely at EPA's discretion	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(G)	Reports – Notification report must be submitted electronically ASAP after outage resolved	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)	Reports – Provisions for claiming force majeure for late CEDRI report submittal in (iv)(A)-(E)	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)(A)	Reports – Force majeure event occurred with the period of time 5 business days before deadline	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)(B)	Reports – Submit notification to EPA ASAP	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)(C)	Reports – Contents of required notification report in (C)(1)-(4)	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)(D)	Reports – Must accept deadline extension solely at EPA's discretion	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)(E)	Reports – Notification report must be submitted electronically ASAP after force majeure event	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)	Reports – NOCS meet (d)(1)(i)-(ii). C=C plants also add (iv)-(v) 150 days post compliance date	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)(i)	Reports – Except for (d)(1)(iv)-(v), submit as per subpart or in Title V permit application	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)(iv)	Reports – NOCS information required for C=C plant flares post-RTR	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)(v)	Reports – NOCS information required for PRDs in OHAP service in (v)(A)-(B)	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)(v)(A)	Reports – Information on PRD monitoring systems and process parameters monitored	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)(v)(B)	Reports – Information on prevention measures employed for each affected PRD	Reporting
EMPU	NA	OL3-EMPU	63.1110(e)(1)	Reports – Periodic reports as per subparts except for (e)(4)-(8)	Reporting
EMPU	NA	OL3-EMPU	63.1110(e)(2)	Reports – Periodic reports due 60 days after each 6-month period	Reporting
EMPU	NA	OL3-EMPU	63.1110(e)(3)	Reports – Information submitted in Title V report need not be submitted in periodic report	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1110(e)(4)**	Reports – Post RTR C=C Plant periodic flare reports must include information in (e)(4)(i)-(vi)	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(i)	Reports – Periods when regulated material routed to flare with no pilot or flare flame present	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(ii)	Reports – Periods when visible emissions > 5 minutes for each period of 2 consecutive hours	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(iii)	Reports – Periods when flare monitoring not conducted per 63.1109(e)(7)	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(iv)	Reports – Events where flare RC/CA analysis required provide (iv)(A)-C information	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(iv)(A)	Reports – Start and stop time of flaring event	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(iv)(B)	Reports – Length of time emissions were visible from flare during event	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(iv)(C)	Reports – Information associated with RC/CA analysis	Reporting
Maintenance Vents	NA	OL3-MV	**63.1110(e)(5)**	Reports – MV periodic reports include information in (5)(i)-(iv) for release exceeding limits	Reporting
Maintenance Vents	NA	OL3-MV	63.1110(e)(5)(i)	Reports – MV and equipment served by MV	Reporting
Maintenance Vents	NA	OL3-MV	63.1110(e)(5)(ii)	Reports – Date and time MV opened to atmosphere	Reporting
Maintenance Vents	NA	OL3-MV	63.1110(e)(5)(iii)	Reports – Measured parameters during MV opening	Reporting
Maintenance Vents	NA	OL3-MV	63.1110(e)(5)(iv)	Reports – Estimate of OHAP emitted during MV event	Reporting
Bypass Lines	NA	OL3-BL	63.1110(e)(6)	Reports – BL periodic reports must include information describing bypass of control device	Reporting
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1110(e)(7)	Reports – DC periodic reports for C=C furnace include information in (7)(i)-(iii)	Reporting
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1110(e)(7)(i)	Reports – Report instances when DC control measures were not followed	Reporting
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1110(e)(7)(ii)	Reports – Report instances when isolation valve inspections were not performed	Reporting
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1110(e)(7)(iii)	Reports – Report instances when isolation valve repairs exceeded 1 calendar day	Reporting
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	**63.1110(e)(8)**	Reports – C=C plant PRD periodic reports include information in (8)(i)-(iii)	Reporting
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1110(e)(8)(i)	Reports – Report PRD instrument readings > 500 ppm	Reporting
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1110(e)(8)(ii)	Reports – Report confirmation that all required PRD monitoring was performed	Reporting
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1110(e)(8)(iii)	Reports – Report each PRD release and results of RC/CA analysis	Reporting
EMPU	NA	OL3-EMPU	63.1110(f)	Reports – All reports must contain information in (f)(1)-(4)	Reporting

Appendix D-Master - Master List of New EMACT RTR Regulatory Citations

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
EMPU	NA	OL3-EMPU	63.1110(f)(1)	Reports – Name, address and telephone number of owner/operator	Reporting
EMPU	NA	OL3-EMPU	63.1110(f)(2)	Reports – Name, address and telephone number of person to contact with inquiries	Reporting
EMPU	NA	OL3-EMPU	63.1110(f)(3)	Reports – Address (physical location) of the facility	Reporting
EMPU	NA	OL3-EMPU	63.1110(f)(4)	Reports – Identification of each affected source covered by the submittal	Reporting
EMPU	NA	OL3-EMPU	63.1110(g)(1)	Reports – Submit reports both via CEDRI and hard copy	Reporting
EMPU	NA	OL3-EMPU	63.1110(g)(2)	Reports – OK to provide EPA with copy of reports sent to State Agency	Reporting
EMPU	NA	OL3-EMPU	63.1111(c)	Post-RTR Malfunction R&R – After July 6, 2023, follow these requirements	Recordkeeping
EMPU	NA	OL3-EMPU	63.1111(c)(1)	Post-RTR Malfunction R&R – Keep malfunction records in (c)(1)(i)-(iii)	Recordkeeping
EMPU	NA	OL3-EMPU	63.1111(c)(1)(i)	Post-RTR Malfunction R&R – Record of each malfunction where standard exceeded	Recordkeeping
EMPU	NA	OL3-EMPU	63.1111(c)(1)(ii)	Post-RTR Malfunction R&R – Record of affected malfunctions including description/emissions	Recordkeeping
EMPU	NA	OL3-EMPU	63.1111(c)(1)(iii)	Post-RTR Malfunction R&R – Record of affected malfunctions actions taken and CA	Recordkeeping
EMPU	NA	OL3-EMPU	63.1111(c)(2)	Post-RTR Malfunction R&R – Report each affected malfunction in periodic report	Reporting
Heat Exchange Systems	NA	OL3-CTWR	63.1085(e)	Post-RTR must now monitor for strippable hydrocarbons per 63.1086(e)	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1085(f)	Post-RTR must now repair leaks per 63.1087(c)-(d) unless DOR per 63.1088(d)	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)	Post-RTR must perform monitoring of each affected HES per (e)(1)-(5)	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(1)	Post-RTR identifies monitoring locations for closed-loop recirculating HES in (e)(1)(i) or (ii)	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(1)(i)	Post-RTR monitor each CT return line or any representative riser prior to exposure to air	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(1)(ii)	Post-RTR monitor HE exit lines so each HE or group of HEs in HES is covered by the location	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(2)	Post-RTR identifies monitoring locations for once-through HES	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(3)	Post-RTR comply with either strippable organic action level or mass emission rate action level	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(3)(i)	Post-RTR use Modified El Paso Method (MEPM) to monitor strippable organic using an FID	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(3)(ii)	Post-RTR convert MEPM readings to mass emission rates using calculations in MEPM	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)	Post-RTR comply with monitoring frequency and Leak Action Level (LAL) in (e)(4)(i)-(iii)	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)(i)	Post-RTR existing source monitor quarterly – if leaking HES monitor monthly at specified LAL	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)(ii)	Post-RTR intermediate source monitor per (e)(4)(ii)(A)-(B)	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)(ii)(A)	Post-RTR monitor weekly for 6 months, then monthly – must monitor weekly if leaking HES	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)(ii)(B)	Post-RTR monitor weekly for 6 months, then monthly – must monitor weekly if leaking HES	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)(iii)	Post-RTR new source monitor weekly for 6 months, then monthly – monitor weekly if HES leaks	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(5)	Post-RTR leak definition is per (5)(i)-(ii)	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(5)(ii)	Post-RTR recirculating HES leak parameter is stripped organic concentration from MEPM	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1087(c)	Post-RTR if HE leak detected must repair leak to below action level within 45 days unless DOR	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1087(c)(1)	Post-RTR leak repair option 1 = physical modifications to HE, like welding or tube replacement	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1087(c)(2)	Post-RTR leak repair option 2 = blocking the leaking tube within the HE	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1087(c)(3)	Post-RTR leak repair option 3 = changing pressure so water flows into process fluid	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1087(c)(4)	Post-RTR leak repair option 4 = replace the HE or HE tube bundle	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1087(c)(5)	Post-RTR leak repair option 5 = isolating, bypassing or otherwise removing HE from service	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1087(d)	Post-RTR if leak found in CW return line, monitor HEs and HE groups to isolate leak source	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1088(d)	Post-RTR DOR – May delay repair if either (d)(1) or (2) is met and leak < DOR action level in (3)	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1088(d)(1)	Post-RTR DOR – OK if fix infeasible w/o shutdown – if leak > DOR action level, fix within 30 days	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1088(d)(2)	Post-RTR DOR – No parts/staff to fix leak - if leak > DOR action level, fix within 30 days	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1088(d)(3)	Post-RTR DOR – DOR action level 62 ppmv; is < 10K gpm circulation, DOR action level = 1.8 kg/hr	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1088(d)(3)(ii)	Post-RTR DOR – DOR rules for recirculating HES	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)	Post RTR HE Records – keep documentation of DOR as per (d)(1)-(4)	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(1)	Post RTR HE Records – document reason for DOR	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(2)	Post RTR HE Records – document schedule for completing repair as soon as practical	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(3)	Post RTR HE Records – document date leak found and all subsequent monitoring during DOR	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(4)	Post RTR HE Records – document total organic emissions from HES for each DOR interval	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(4)(i)	Post RTR HE Records – allowable methods for estimating total organic emissions from leak	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(4)(ii)	Post RTR HE Records - allowable methods for estimating total organic emissions from leak	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(4)(iii)	Post RTR HE Records - allowable methods for estimating total organic emissions from leak	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1090	Post RTR HE Reports – For each DOR, report delay in semiannual (periodic) report	Reporting
Heat Exchange Systems	NA	OL3-CTWR	63.1090(f)	Post RTR HE Reports – Periodic reports must contain information in (f)(1)-(5)	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1090(f)(1)	Post RTR HE Reports – Number of HES subject to leak monitoring	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1090(f)(2)	Post RTR HE Reports – Number of HES found to be leaking during reporting period	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1090(f)(3)	Post RTR HE Reports – Information to include for each monitored leak > leak action level	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1090(f)(4)	Post RTR HE Reports – Information to include for all leaks repaired (including DOR) during period	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1090(f)(5)	Post RTR HE Reports – Information to include for DOR leaks during reporting period	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	**63.670(b)**	Operate flare with pilot flame or flare flame present whenever flare is in service	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(c)	Specify smokeless design capacity – operate with NVE except for 5 min in 2 consecutive hours	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(d)(2)	Operate at all times with flare tip velocity < 400 ft/s and < vmax per specified equation	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(e)	Operate flare with NHVcz > 270 Btu/scf	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(f)	Continuously monitor for presence of flare flame or flare pilot	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(h)	Monitor flare for VE initially and daily – may use camera after initial demonstration	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(h)(1)	Option 1 - monitor VE once/day for 5 min using Method 22	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(h)(2)	Option 2 – continuously monitor and record VE using video camera	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(i)	Monitoring required for vent gas and steam assist flow rates per (i)(1)-(6) options	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(i)(1)	Monitor for T&P so that monitored flows can be adjusted to STP	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(i)(2)	Mass flow monitors may be used for flare gas and corrected to standard flow conditions	Monitoring/Testing

Appendix D-Master - Master List of New EMACT RTR Regulatory Citations

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(i)(3)	Mass flow monitors may be used for assist steam and/or assist air	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(i)(4)	Continuous T&P monitoring systems and calculations may be used if gas MW is known	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(i)(5)	Fan speed or power may be used to monitor flow of assist air	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)	Estimate NHVvg using compositional analysis per (j)(1)-(6) options	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(1)	Monitor individual component concentrations at least once every 15 minutes	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(2)	Monitor individual component concentrations using grab sampling every 8 hours	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(3)	Monitor NHVvg at STP using a calorimeter	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(4)	If calorimeter used, may monitor H2 concentration for allowable correction	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(5)	Direct compositional analysis/NHV not required for natural gas – use data provided here	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(6)	NHV monitoring not required for vent streams with constant NHV per (6)(i)-(iii)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)	Determine vtip as per (k)(1)-(4)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(1)	Use engineering principals to determine cross sectional area of flare tip	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(2)	Determine flare vent gas volumetric flow as per 63.670(i) and (k)(2)(i)-(ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(2)(i)	Rules for averaging periods and times for flare vent gas volumetric flow	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(2)(ii)	Rules if engineering calculations and P&T monitoring option per (i)(4) is used	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(3)	Use equation provided to calculate vtip	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(4)	Calculate vmax using equation in (d)(2)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)	Calculate NHVvg as per requirements in (l)(1)-(6)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(1)	Use equation here to determine NHVvg based on compositional analysis per (j)(1) or (2)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(2)	If calorimeter used per (j)(3), use instrument output to determine NHVvg	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(3)	If calorimeter and H2 monitoring employed, use equation here to determine NHVvg	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(4)	Rules for averaging periods and times for determining NHVvg	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(5)	For compositional monitoring, may use feed-forward per (5)(i) or direct calculation per (5)(ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(5)(i)	Rules to calculate NHVvg using feed-forward method per (5)(i)(A)-(C)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(5)(ii)	Rules to directly calculate NHVvg using direct calculation method per (5)(ii)(A)-(B)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(6)	Rules for determining flare vent gas composition via grab samples per (6)(i)-(ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(7)	OK to monitor and combine data from two or more streams to determine NHVvg	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(m)(1)	Equation to calculate NHVcz if direct compositional monitoring employed	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(m)(2)	Equation to calculate NHVcz if feed-forward compositional monitoring employed	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)	For flares with potential to operate > smokeless design capacity follow (o)(1)-(8)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)	Develop Flare Management Plan (FMP) per (o)(1)(i)-(vii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(i)	FMP includes list of process units, ancillary equipment and fuel gas systems to the flare	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(ii)	FMP can releases to flare be prevented or minimized during SSM per (1)(ii)(A)-(C)?	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(ii)(A)	Can modifying startup/shutdown procedures reduce flow to flare?	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(ii)(B)	Can PRD prevention measures per 63.1107(h)(3)(ii) reduce flow to flare?	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(ii)(C)	Can flare gas recovery system or cogeneration unit reduce flow to flare?	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)	FMP must include flare description per (1)(iii)(A)-(G)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(A)	General description including ground/elevated, type of assist, whether routine/emergency	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(B)	Flare smokeless design capacity based on 15-minute block average	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(C)	Maximum vent gas flow rate (hydraulic load capacity)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(D)	Maximum supplemental gas flow rate	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(E)	For steam assist flares, minimum and maximum total steam rate	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(G)	Simple process flow diagram (PFD) including flare tip, knockout drums flare headers, etc.	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iv)	Description/PFD showing all flows and monitoring equipment	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(v)	Design specs for flow rate, composition, NHV, etc. monitoring equipment	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(vi)	Detailed description of each PRD routed to the flare	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(vii)	Procedures to minimize/eliminate discharges to the flare during SSM events	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(3)	Conduct RCA/CAA after flare flow event described in (3)(i)-(ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(3)(i)	RCA/CAA required if vent gas flow > smokeless design capacity and VE exceedance	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(3)(ii)	RCA/CAA required if vent gas flow > smokeless design capacity and vtip exceedance	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)	Complete RCA/CAA within 45 days for flare flow event described in (3)(i)-(ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)(i)	May conduct single RCA/CAA for each flare event that meets both (3)(i) and (ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)(ii)	May conduct single RCA/CAA for a single flare flow event for either (3)(i) or (ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)(iii)	May conduct single RCA/CAA for single event involving 2 flares in series (cascaded)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)(iv)	May conduct single RCA/CAA for single event involving 2 flares if force majeure event	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)(v)	May conduct single RCA/CAA for events involving 2 flares if events have same root cause	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(5)	If flare RCA/CAA required must implement CA as per requirements in (5)(i)-(iii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(5)(i)	Implement CA within 45 days of event or as soon as practicable – describe in no CA required	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(5)(ii)	If CA cannot be implemented within 45 days of event develop implementation schedule	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(5)(iii)	Within 45 days of event, record CA completed; if not completed, provide schedule	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(6)	Maintain record of flare RCA/CAA events during calendar year for each flare separately	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)	The events in (7)(i)-(v) constitute a violation of this emergency flare work practice standard	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)(i)	Any flow event for which the root cause is operator error or poor maintenance	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)(ii)	Two non-force majeure VE exceedances from single flare in 3-yr period for the same root cause	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)(iii)	Two non-force majeure vtip exceedances from a single flare in 3-yr period for same root cause	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)(iv)	Three non-force majeure VE exceedances from a single flare in a 3-yr period for any reason	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)(v)	Three non-force majeure vtip exceedances from a single flare in a 3-yr period for any reason	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	**63.671(a)**	Install/operate/calibrate/maintain each flare CPMS as per (a)(1)-(8)	Monitoring/Testing

Appendix D-Master - Master List of New EMACT RTR Regulatory Citations

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(1)	Flare CPMS must meet accuracy, calibration and QC requirements in MACT CC Table 13	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(2)	CPMS readout must be readily accessible onsite for operational control or operator inspection	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(3)	CPMS must complete a minimum of 1 cycle of operations for each successive 15-min period	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(4)	Operate each CPMS at all times flare in service except as provided in this citation	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(5)	Operate, maintain and calibrate each CPMS according to the CPMS monitoring plan	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(6)	For each CPMS (except pilot monitoring) comply with out-of-control procedures in 63.671(c)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(7)	Reduce data for each CPMS as specified in 63.671(d)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(8)	CPMS must be able to measure parameter over expected range – data recording ? accuracy	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)	Develop/implement a CPMS Monitoring Plan for each flare CPMS as per (b)(1)-(5)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(1)	Identify flare monitored and flare type	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(2)	Identify CPMS monitoring parameters and expected range(s) of parameter values	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)	Describe CPMS monitoring equipment as per (b)(3)(i)-(vii)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(i)	Identify manufacturer/model number of all CPMS monitoring system components	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(ii)	Identify manufacturer performance specifications and any differences for this installation	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(iii)	Identify location of CPMS sampling probe or interface and show how it meets MACT CC Table 13	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(iv)	Identify placement of CPMS readout and show how it is readily accessible	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(v)	Show span of CPMS sensor and confirm analyzer encompasses full range of expected values	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(vi)	Describe how data outside CPMS range will be handled and corrective action to address	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(vii)	Identify algorithm that converts parameter signal to value used to demonstrate compliance	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(4)	Describe data collection/reduction system as per (4)(i)-(iii)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(4)(i)	Show data acquisition algorithm use to reduce measured data in reportable form of standard	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(4)(ii)	Describe if algorithm excludes data during CPMS breakdowns, out-of-control periods, etc.	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(4)(iii)	If CPMS does not exclude data, describe procedure for excluding data for compliance purposes	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)	Identify CPMS routine QA/QC procedures as per (5)(i)-(vi) to assess CPMS performance	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(i)	SOP for initial and subsequent CPMS calibration and acceptable criteria	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(ii)	SOP to determine and correct calibration drift of the CPMS	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(iii)	SOP for daily checks for indications CPMS is responding properly	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(iv)	SOP for CPMS preventive maintenance and a spare parts inventory	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(v)	SOP for CPMS data recording, calculations and reporting	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(vi)	SOP to implement corrective actions if CPMS is not operating properly	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(c)	For flare CPMS (except pilot monitoring), meet out-of-control procedures in (c)(1)-(2)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(c)(1)	CPMS is out-of-control if low/mid/high-level calibration drift exceeds 2X Table 13 spec	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(c)(2)	If CPMS is out-of-control take corrective actions as described in this citation	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(d)	Reduce flare CPMS data as per (d)(1)-(3)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(d)(1)	Round flare CPMS data to same number of significant digits used in the operating limit	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(d)(2)	Identify periods of non-operation of the process unit which feeds vent gas to flare	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(d)(3)	Exclude data from out-of-control periods in CPMS 15-minute block averages	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)	For monitors used to determine compositional analysis the GC must meet (e)(1)-(3)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(1)	GC must meet QA requirements in MACT CC Table 13	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(2)	GC calibration gases must meet either (e)(2)(i) or (e)(2)(ii)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(2)(i)	GC cal gas includes all compounds listed in this citation reasonably expected in vent gas	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(2)(ii)	GC cal gas is surrogate that contains hydrogen and normal C1 through C5 compounds	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(3)	If surrogate cal gas used per (e)(2)(ii), must comply with (3)(i)- (iii)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(3)(i)	Must use response factor for nearest normal HC to quantify unknown components	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(3)(ii)	Must use response factor for n-pentane to quantify components that elute after n-pentane	Monitoring/Testing

Appendix D1 - OP-2 Table 2 Revision 4 - New EMACT RTR Regulatory Citations for Group ID GRP-ESAF - SOP Index 63YY-8

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1103(e)(3) - Table 7(d)**	PV flow ≥ 0.011 scmm & OHAP > 50 ppmvd, use flare meeting post-RTR EMACT requirements	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1103(e)(4)**	Flares – comply 63.670 and 63.671 (with exceptions)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(ii)	Flare Management Plan (FMP) instead of 63.670(o)(2)(i)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(iii)	Report - Submit FMP via CEDRI	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(iv)	Comply with flare tip velocity requirement at all times [63.670(o)(3)(ii) does not apply]	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(v)	In 63.670 and 671, "petroleum refinery" = "ethylene production unit"	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(vi)	In 63.670 and 671, "refinery" does not apply	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(ix)	Monitoring - Calibration error for NHV must be < 10% in daily and quarterly audits	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(xii)	Monitoring In 63.670(b)&(g), "pilot flame" = "pilot flame or flare flame"	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.1103(e)(4)(xiii)	Rules for 15-min block times for flare tip velocity and combustion zone operating limits	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1104(a)**	Process vents routed to a Group 1 control device can simply be designated as Group 1 vents	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(b)	Sampling locations identified for TRE determinations	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(c)	Process vent applicability procedures to determine TRE index	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(d)	Limited process vent TRE determination exceptions (should not apply)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(e)	Method to determine TOC or OHAP concentrations	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(f)	Method to determine volumetric flow rate	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(g)	Method for determining vent gas NHV	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(h)	Equation to calculate TOC or OHAP emission rate	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(i)	Method for assessing halogenated vent streams	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(j)	Method for calculating TRE index	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(k)	Method for performing TRE index determinations via engineering assessment	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1104(l)(1)**	Records – TRE index value determination records must be kept	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(l)(2)	Records – maintain record of flow rates used in TRE determinations	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(l)(3)	Records – maintain record of OHAP and TOC concentrations used in TRE determinations	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(l)(4)	Records – maintain record of process changes that change process vent control requirements	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1104(m)(1)**	Reports – in NOCS submittals report info in (l)(1)-(3)	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1104(m)(2)	Reports – if process change requires PV control change, report within 60 days	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1105(a)(5)**	Transfer racks routed to flare must meet 63.670/671 requirements post-RTR	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1109(e)**	Flare Records – Post RTR, keep records in (e)(1)-(15) in lieu of old Subpart SS records	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(1)	Flare Records – Record of continuous pilot/flare flame monitoring	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(2)	Flare Records – Record of daily visible emissions (VE) observation per (2)(i)-(iv)	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(2)(i)	Flare Records – Identify all periods when material is being sent to the flare	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(2)(ii)	Flare Records – Rules for recording data when Method 22 VE observations are made	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(2)(iii)	Flare Records – If video use, record all surveillance images with time and date stamps	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(2)(iv)	Flare Records – Record each 2-hr period where VE are observed for more than 5 minutes	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(3)	Flare Records – Record vent flows, steam assist, pressure, temperature, MW flare gas, etc.	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(4)	Flare Records – Record flare vent gas compositions and if calorimeter used NHVvg	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(5)	Flare Records – Record specified operating parameters per 63.670(k)-(n) as applicable	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(6)	Flare Records – Record all periods when monitored parameters outside of specified range	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(7)	Flare Records – Record all periods when flare monitoring not conducted	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(8)	Flare Records – Records required for multi-point pressure assisted flares	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(9)	Flare Records – More records required for multi-point pressure assisted flares	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(10)	Flare Records – More records required for multi-point pressure assisted flares	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(11)	Flare Records – Periods when vent gas flows to flare by no regulated material to flare	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(12)	Flare Records – Records of periods when vent gas flow exceeds flare smokeless design capacity	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(13)	Flare Records – Records required of flare RC/CA conducted per 63.670(o)(3)-(5)	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(14)	Flare Records – More records required of flare RC/CA conducted per 63.670(o)(3)-(5)	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.1109(e)(15)	Flare Records – Records of when CPMS is malfunctioning per 63.10(b)(2)(vi)	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	**63.1110(e)(4)**	Reports – Post RTR C=C Plant periodic flare reports must include information in (e)(4)(i)-(vi)	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(i)	Reports – Periods when regulated material routed to flare with no pilot or flare flame present	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(ii)	Reports – Periods when visible emissions > 5 minutes for each period of 2 consecutive hours	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(iii)	Reports – Periods when flare monitoring not conducted per 63.1109(e)(7)	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(iv)	Reports – Events where flare RC/CA analysis required provide (iv)(A)-C information	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(iv)(A)	Reports – Start and stop time of flaring event	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(iv)(B)	Reports – Length of time emissions were visible from flare during event	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	63.1110(e)(4)(iv)(C)	Reports – Information associated with RC/CA analysis	Reporting
Flares	GRP-ESAF	OL3FLRA/B/C	**63.670(b)**	Operate flare with pilot flame or flare flame present whenever flare is in service	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(c)	Specify smokeless design capacity – operate with NVE except for 5 min in 2 consecutive hours	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(d)(2)	Operate at all times with flare tip velocity < 400 ft/s and < vmax per specified equation	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(e)	Operate flare with NHVcz > 270 Btu/scf	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(f)	Continuously monitor for presence of flare flame or flare pilot	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(h)	Monitor flare for VE initially and daily – may use camera after initial demonstration	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(h)(1)	Option 1 - monitor VE once/day for 5 min using Method 22	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(h)(2)	Option 2 – continuously monitor and record VE using video camera	Monitoring/Testing

Appendix D1 - OP-2 Table 2 Revision 4 - New EMACT RTR Regulatory Citations for Group ID GRP-ESAF - SOP Index 63YY-8

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(i)	Monitoring required for vent gas and steam assist flow rates per (i)(1)-(6) options	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(i)(1)	Monitor for T&P so that monitored flows can be adjusted to STP	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(i)(2)	Mass flow monitors may be used for flare gas and corrected to standard flow conditions	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(i)(3)	Mass flow monitors may be used for assist steam and/or assist air	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(i)(4)	Continuous T&P monitoring systems and calculations may be used if gas MW is known	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)	Estimate NHVvg using compositional analysis per (j)(1)-(6) options	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(1)	Monitor individual component concentrations at least once every 15 minutes	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(2)	Monitor individual component concentrations using grab sampling every 8 hours	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(3)	Monitor NHVvg at STP using a calorimeter	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(4)	If calorimeter used, may monitor H2 concentration for allowable correction	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(5)	Direct compositional analysis/NHV not required for natural gas – use data provided here	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(j)(6)	NHV monitoring not required for vent streams with constant NHV per (6)(i)-(iii)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)	Determine vtip as per (k)(1)-(4)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(1)	Use engineering principals to determine cross sectional area of flare tip	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(2)	Determine flare vent gas volumetric flow as per 63.670(i) and (k)(2)(i)-(ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(2)(i)	Rules for averaging periods and times for flare vent gas volumetric flow	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(2)(ii)	Rules if engineering calculations and P&T monitoring option per (i)(4) is used	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(3)	Use equation provided to calculate vtip	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(k)(4)	Calculate vmax using equation in (d)(2)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)	Calculate NHVvg as per requirements in (l)(1)-(6)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(1)	Use equation here to determine NHVvg based on compositional analysis per (j)(1) or (2)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(2)	If calorimeter used per (j)(3), use instrument output to determine NHVvg	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(3)	If calorimeter and H2 monitoring employed, use equation here to determine NHVvg	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(4)	Rules for averaging periods and times for determining NHVvg	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(5)	For compositional monitoring, may use feed-forward per (5)(i) or direct calculation per (5)(ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(5)(i)	Rules to calculate NHVvg using feed-forward method per (5)(i)(A)-(C)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(5)(ii)	Rules to directly calculate NHVvg using direct calculation method per (5)(ii)(A)-(B)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(6)	Rules for determining flare vent gas composition via grab samples per (6)(i)-(ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(l)(7)	OK to monitor and combine data from two or more streams to determine NHVvg	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(m)(1)	Equation to calculate NHVcz if direct compositional monitoring employed	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(m)(2)	Equation to calculate NHVcz if feed-forward compositional monitoring employed	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)	For flares with potential to operate > smokeless design capacity follow (o)(1)-(8)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)	Develop Flare Management Plan (FMP) per (o)(1)(i)-(vii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(i)	FMP includes list of process units, ancillary equipment and fuel gas systems to the flare	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(ii)	FMP can releases to flare be prevented or minimized during SSM per (1)(ii)(A)-(C)?	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(ii)(A)	Can modifying startup/shutdown procedures reduce flow to flare?	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(ii)(B)	Can PRD prevention measures per 63.1107(h)(3)(ii) reduce flow to flare?	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(ii)(C)	Can flare gas recovery system or cogeneration unit reduce flow to flare?	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)	FMP must include flare description per (1)(iii)(A)-(G)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(A)	General description including ground/elevated, type of assist, whether routine/emergency	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(B)	Flare smokeless design capacity based on 15-minute block average	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(C)	Maximum vent gas flow rate (hydraulic load capacity)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(D)	Maximum supplemental gas flow rate	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(E)	For steam assist flares, minimum and maximum total steam rate	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iii)(G)	Simple process flow diagram (PFD) including flare tip, knockout drums flare headers, etc.	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(iv)	Description/PFD showing all flows and monitoring equipment	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(v)	Design specs for flow rate, composition, NHV, etc. monitoring equipment	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(vi)	Detailed description of each PRD routed to the flare	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(1)(vii)	Procedures to minimize/eliminate discharges to the flare during SSM events	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(3)	Conduct RCA/CAA after flare flow event described in (3)(i)-(ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(3)(i)	RCA/CAA required if vent gas flow > smokeless design capacity and VE exceedance	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(3)(ii)	RCA/CAA required if vent gas flow > smokeless design capacity and vtip exceedance	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)	Complete RCA/CAA within 45 days for flare flow event described in (3)(i)-(ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)(i)	May conduct single RCA/CAA for each flare event that meets both (3)(i) and (ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)(ii)	May conduct single RCA/CAA for a single flare flow event for either (3)(i) or (ii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)(iii)	May conduct single RCA/CAA for single event involving 2 flares in series (cascaded)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)(iv)	May conduct single RCA/CAA for single event involving 2 flares if force majeure event	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(4)(v)	May conduct single RCA/CAA for events involving 2 flares if events have same root cause	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(5)	If flare RCA/CAA required must implement CA as per requirements in (5)(i)-(iii)	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(5)(i)	Implement CA within 45 days of event or as soon as practicable – describe in no CA required	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(5)(ii)	If CA cannot be implemented within 45 days of event develop implementation schedule	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(5)(iii)	Within 45 days of event, record CA completed; if not completed, provide schedule	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(6)	Maintain record of flare RCA/CAA events during calendar year for each flare separately	Recordkeeping
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)	The events in (7)(i)-(v) constitute a violation of this emergency flare work practice standard	Requirement

Appendix D1 - OP-2 Table 2 Revision 4 - New EMACT RTR Regulatory Citations for Group ID GRP-ESAF - SOP Index 63YY-8

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)(i)	Any flow event for which the root cause is operator error or poor maintenance	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)(ii)	Two non-force majeure VE exceedances from single flare in 3-yr period for the same root cause	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)(iii)	Two non-force majeure vtip exceedances from a single flare in 3-yr period for same root cause	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)(iv)	Three non-force majeure VE exceedances from a single flare in a 3-yr period for any reason	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	63.670(o)(7)(v)	Three non-force majeure vtip exceedances from a single flare in a 3-yr period for any reason	Requirement
Flares	GRP-ESAF	OL3FLRA/B/C	**63.671(a)**	Install/operate/calibrate/maintain each flare CPMS as per (a)(1)-(8)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(1)	Flare CPMS must meet accuracy, calibration and QC requirements in MACT CC Table 13	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(2)	CPMS readout must be readily accessible onsite for operational control or operator inspection	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(3)	CPMS must complete a minimum of 1 cycle of operations for each successive 15-min period	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(4)	Operate each CPMS at all times flare in service except as provided in this citation	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(5)	Operate, maintain and calibrate each CPMS according to the CPMS monitoring plan	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(6)	For each CPMS (except pilot monitoring) comply with out-of-control procedures in 63.671(c)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(7)	Reduce data for each CPMS as specified in 63.671(d)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(a)(8)	CPMS must be able to measure parameter over expected range – data recording ? accuracy	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)	Develop/implement a CPMS Monitoring Plan for each flare CPMS as per (b)(1)-(5)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(1)	Identify flare monitored and flare type	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(2)	Identify CPMS monitoring parameters and expected range(s) of parameter values	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)	Describe CPMS monitoring equipment as per (b)(3)(i)-(vii)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(i)	Identify manufacturer/model number of all CPMS monitoring system components	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(ii)	Identify manufacturer performance specifications and any differences for this installation	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(iii)	Identify location of CPMS sampling probe or interface and show how it meets MACT CC Table 1	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(iv)	Identify placement of CPMS readout and show how it is readily accessible	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(v)	Show span of CPMS sensor and confirm analyzer encompasses full range of expected values	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(vi)	Describe how data outside CPMS range will be handled and corrective action to address	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(3)(vii)	Identify algorithm that converts parameter signal to value used to demonstrate compliance	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(4)	Describe data collection/reduction system as per (4)(i)-(iii)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(4)(i)	Show data acquisition algorithm use to reduce measured data in reportable form of standard	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(4)(ii)	Describe if algorithm excludes data during CPMS breakdowns, out-of-control periods, etc.	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(4)(iii)	If CPMS does not exclude data, describe procedure for excluding data for compliance purposes	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)	Identify CPMS routine QA/QC procedures as per (5)(i)-(vi) to assess CPMS performance	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(i)	SOP for initial and subsequent CPMS calibration and acceptable criteria	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(ii)	SOP to determine and correct calibration drift of the CPMS	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(iii)	SOP for daily checks for indications CPMS is responding properly	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(iv)	SOP for CPMS preventive maintenance and a spare parts inventory	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(v)	SOP for CPMS data recording, calculations and reporting	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(b)(5)(vi)	SOP to implement corrective actions if CPMS is not operating properly	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(c)	For flare CPMS (except pilot monitoring), meet out-of-control procedures in (c)(1)-(2)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(c)(1)	CPMS is out-of-control if low/mid/high-level calibration drift exceeds 2X Table 13 spec	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(c)(2)	If CPMS is out-of-control take corrective actions as described in this citation	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(d)	Reduce flare CPMS data as per (d)(1)-(3)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(d)(1)	Round flare CPMS data to same number of significant digits used in the operating limit	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(d)(2)	Identify periods of non-operation of the process unit which feeds vent gas to flare	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(d)(3)	Exclude data from out-of-control periods in CPMS 15-minute block averages	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)	For monitors used to determine compositional analysis the GC must meet (e)(1)-(3)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(1)	GC must meet QA requirements in MACT CC Table 13	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(2)	GC calibration gases must meet either (e)(2)(i) or (e)(2)(ii)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(2)(i)	GC cal gas includes all compounds listed in this citation reasonably expected in vent gas	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(2)(ii)	GC cal gas is surrogate that contains hydrogen and normal C1 through C5 compounds	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(3)	If surrogate cal gas used per (e)(2)(ii), must comply with (3)(i)- (iii)	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(3)(i)	Must use response factor for nearest normal HC to quantify unknown components	Monitoring/Testing
Flares	GRP-ESAF	OL3FLRA/B/C	63.671(e)(3)(ii)	Must use response factor for n-pentane to quantify components that elute after n-pentane	Monitoring/Testing

Appendix D2 - OP-2 Table 2 Revision 5 - New EMACT RTR Regulatory Citations for Source ID OL3-MV - SOP Index 63YY-9

Types of Affected Source(s)	Source or Group IDs in OP-2 and OP-REQ3	Regulatory Citation	Requirement Description	Requirement Type
Maintenance Vents	OL3-MV	**63.1103(e)(5)**	MV – Requirement to designate Maintenance Vents (MVs)	Requirement
Maintenance Vents	OL3-MV	63.1103(e)(5)(i)	MV – De-inventory equipment to flare before venting to atmosphere via MV	Requirement
Maintenance Vents	OL3-MV	63.1103(e)(5)(i)(A)	MV – OK to open equipment if LEL < 10% measured in situ	Requirement
Maintenance Vents	OL3-MV	63.1103(e)(5)(i)(B)	MV – No in situ LEL meter – reduce P to < 5 psig – no active venting until LEL < 10%	Requirement
Maintenance Vents	OL3-MV	63.1103(e)(5)(i)(C)	MV – OK to open equipment if it contains < 50 lb VOC	Requirement
Maintenance Vents	OL3-MV	63.1103(e)(5)(i)(D)	MV – Option to reduce P to ? 2 psig and install/remove blind flange	Requirement
Maintenance Vents	OL3-MV	63.1103(e)(5)(ii)	MV – If LEL monitor used, must follow manufacturers calibration and maintenance procedures	Requirement
Maintenance Vents	OL3-MV	63.1103(e)(5)(iii)	MV – If 50 lb VOC option is used, engineering study must be performed	Requirement
Maintenance Vents	OL3-MV	**63.1109(f)**	MV Records – For each MV opening, keep records per (f)(1)-(5)	Recordkeeping
Maintenance Vents	OL3-MV	63.1109(f)(1)	MV Records – Maintain SOPs to de-inventory equipment	Recordkeeping
Maintenance Vents	OL3-MV	63.1109(f)(2)	MV Records – Records for in-situ LEL readings > 10%	Recordkeeping
Maintenance Vents	OL3-MV	63.1109(f)(3)	MV Records – Records for P/LEL option where P < 5 psig or LEL >10% and active purging started	Recordkeeping
Maintenance Vents	OL3-MV	63.1109(f)(4)	MV Records – Records of engineering assessment if 50 lb VOC option used on MV	Recordkeeping
Maintenance Vents	OL3-MV	63.1109(f)(5)	MV Records – Records required if < 2 psig and blind flange option is required w/ explanation	Recordkeeping
Maintenance Vents	OL3-MV	**63.1100(e)(5)**	Reports – MV periodic reports include information in (5)(i)-(iv) for release exceeding limits	Reporting
Maintenance Vents	OL3-MV	63.1110(e)(5)(i)	Reports – MV and equipment served by MV	Reporting
Maintenance Vents	OL3-MV	63.1110(e)(5)(ii)	Reports – Date and time MV opened to atmosphere	Reporting
Maintenance Vents	OL3-MV	63.1110(e)(5)(iii)	Reports – Measured parameters during MV opening	Reporting
Maintenance Vents	OL3-MV	63.1110(e)(5)(iv)	Reports – Estimate of OHAP emitted during MV event	Reporting

Appendix D3 - OP-2 Table 2 Revision 6 - New EMACT RTR Regulatory Citations for Source ID OL3-BL - SOP Index 63YY-10

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Bypass Lines	NA	OL3-BL	63.1103(e)(3) - Table 7(i)	Comply with bypass line requirements in 63.1103(e)(6) and (9)	Requirement
Bypass Lines	NA	OL3-BL	63.1103(e)(6)	Bypass Lines (BL) – any bypass of emissions from control device to atmosphere is violation	Requirement
Bypass Lines	NA	OL3-BL	63.1103(e)(6)(i)	BL – possible exemptions	Requirement
Bypass Lines	NA	OL3-BL	63.1103(e)(6)(ii)	BL – capped or blinded open-ended lines and double valves lines not subject to BL requirements	Requirement
Bypass Lines	NA	OL3-BL	63.1109(g)	BL Records – Records required for bypass lines	Recordkeeping
Bypass Lines	NA	OL3-BL	63.1110(e)(6)	Reports – BL periodic reports must include information describing bypass of control device	Reporting

Appendix D4 - OP-2 Table 2 Revision 7 - New EMACT RTR Regulatory Citations for Source ID OL3-SVD - SOP Index 63YY-11

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Storage Vessel Degassing	NA	OL3-SVD	**63.1103(e)(10)**	SVD – Degas until < 10% LEL for any vessel storing a liquid than contains HAP(s)	Requirement
Storage Vessel Degassing	NA	OL3-SVD	63.1103(e)(10)(i)	SVD – Remove liquids as much as practicable prior to Storage Vessel Degassing (SVD)	Requirement
Storage Vessel Degassing	NA	OL3-SVD	63.1103(e)(10)(ii)(A)	SVD – Control SVD emissions of total OHAP by 98% by routing to a flare	Requirement
Storage Vessel Degassing	NA	OL3-SVD	63.1103(e)(10)(ii)(B)	SVD – Control SVD emissions of total OHAP by 98% by routing to a non-flare control device	Requirement
Storage Vessel Degassing	NA	OL3-SVD	63.1103(e)(10)(ii)(C)	SVD – Control SVD emissions of total OHAP by 98% by routing to a fuel gas system or process	Requirement
Storage Vessel Degassing	NA	OL3-SVD	63.1103(e)(10)(iii)	SVD – Maintain records, including site SVD procedures, to show general duty compliance	Recordkeeping

Appendix D5 - OP-2 Table 2 Revision 8 - New EMACT RTR Regulatory Citations for Source ID OL3-APRD - SOP Index 63YY-12

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(1)	PRDs – Except during pressure release, PRDs in gas/vapor OHAP service maintain < 500 ppmv	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(2)	PRDs – PRDs in gas/vapor OHAP service follow (2)(i)-(iii) following a pressure release	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(2)(i)	PRDs – After release (if no rupture disk), monitor within 5 calendar days to show < 500 ppm	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(2)(ii)	PRDs – After release if rupture disk present, replace disk within 5 calendar days	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(2)(iii)	PRDs – If rupture disk only (no PRD) replace disk within 5 calendar days after release	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)	PRDs – Pressure Release Management: follow (3)(i)-(v) for all PRDs in OHAP service	Monitoring/Testing
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	**63.1107(h)(3)(i)**	PRDs – Install monitoring system that meets (3)(i)(A)-(C)	Monitoring/Testing
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(i)(A)	PRDs – Monitoring system must identify any pressure release	Monitoring/Testing
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(i)(B)	PRDs – Monitoring system must record time and duration of each pressure release	Monitoring/Testing
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(i)(C)	PRDs – Monitoring system must notify operators of release with various types of monitors	Monitoring/Testing
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)	PRDs – Must apply at least 3 redundant prevention measures to each PRD as per (A)-(E)	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)(A)	PRDs – Option 1: Install flow, temperature, liquid level, pressure indicators	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)(B)	PRDs – Option 2: Document routine inspection/maintenance programs and/or operator training	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)(C)	PRDs – Option 3: Employ inherently safter designs or safety instrumentation systems	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)(D)	PRDs – Option 4: Employ deluge systems	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(ii)(E)	PRDs – Option 5: Install staged release where first release goes to a flare or control device	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(iii)	PRDs – Atmospheric PRD releases require root cause and corrective action analyses and calcs	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(iv)	PRDs – Determine calendar year count of release events for each PRD	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(v)	PRDs – Atmospheric PRD releases are violations if any (v)(A)-(C) conditions are met	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(v)(A)	PRDs – Any PRD release which root cause is operator error or poor maintenance is violation	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(v)(B)	PRDs – Any second PRD release event within 3 calendar years with same root cause/equipment	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(3)(v)(C)	PRDs – Any third release from same PRD within 3 calendar years except for force majeure	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(4)(ii)	PRDs – PRDs routed to control must meet certain MACT SS requirements	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(4)(iii)	PRDs – PRDs to drain system OK if drain system meets certain BWON requirements	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(6)	PRDs – Root cause (RC) & corrective action (CA) analysis no later than 45 days after PRD release	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(6)(i)	PRDs – Single RC/CA analysis OK for 1 event where over 2 PRDs on same equipment release	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(6)(ii)	PRDs – Single RC/CA analysis OK for multiple PRD release event if caused by force majeure	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(6)(iii)	PRDs – Rules for single PRD with multiple release events	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(7)	PRDs – When RC/CA required, CA must be implemented	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(7)(i)	PRDs – Implement CA within 45 days, or document why no CA required	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(7)(ii)	PRDs – If CA requires > 45 days, develop CA plan and implementation schedule	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(7)(iii)	PRDs – Within 45 days, record CA completed to date, and detailed implementation schedule	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1107(h)(8)	PRDs – Flowing pilot-operated PRDs prohibited	Requirement
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	**63.1109(i)**	PRD Records – For each PRD subject to PR release management maintain records per (i)(1)-(3)	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(1)	PRD Records – Identify release prevention measures per 63.107(h)(3)(ii)	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(2)	PRD Records – Number releases per calendar year and number root cause was force majeure	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(3)	PRD Records – For each PRD release to atmosphere, keep records per (i)(3)(i)-(iv)	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(3)(i)	PRD Records – Start and end time of each PRD release to atmosphere	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(3)(ii)	PRD Records – Data, assumptions and calculations used to estimate mass OHAP released	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(3)(iii)	PRD Records – PRD release RC/CA analyses and actions with explanations	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1109(i)(3)(iv)	PRD Records – When CA required, description of CA within 45 days and schedule if not complete	Recordkeeping
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	**63.1110(e)(8)**	Reports – C=C plant PRD periodic reports include information in (8)(i)-(iii)	Reporting
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1110(e)(8)(i)	Reports – Report PRD instrument readings > 500 ppm	Reporting
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1110(e)(8)(ii)	Reports – Report confirmation that all required PRD monitoring was performed	Reporting
Atmospheric PRDs in OHAP Service	NA	OL3-APRD	63.1110(e)(8)(iii)	Reports – Report each PRD release and results of RC/CA analysis	Reporting

Appendix D6 - OP-2 Table 2 Revision 9 - New EMACT RTR Regulatory Citations for Group ID GRP-OL3DK - SOP Index 63YY-13

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	**63.1103(e)(3) - Table 7(j)**	Comply with ethylene cracking funrance decoking requirements in 63.1103(e)(7) and (8)	Requirement
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	**63.1103(e)(7)**	Decoking (DC) – use at least two specified control methods in (ii) through (v)	Requirement
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(i)	DC – Daily inspection of firebox burners	Requirement
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(i)(A)	DC - If shutdown causes emissions > delaying repair, fix during next decoking or shutdown	Requirement
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(i)(B)	DC – If shutdown causes emissions < delaying repair, shut down furnace and fix	Requirement
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(iii)	DC – Monitor T at radiant tubes outlet to ensure tubes don't become too hot	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(iv)	DC – Monitor - After docking, verify decoke air no longer being added before restarting furnace	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(7)(v)	DC – Monitor - After decoking, inject material in feed or steam to reduce coke formation	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(8)	IVI – Monitor - Conduct furnace isolation valve inspections per (i) and (ii)	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(8)(i)	IVI – Monitor - Inspect isolation valve prior to decoking and fix if poor isolation	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1103(e)(8)(ii)	IVI – Monitor - Inspect isolation valve after decoking and fix if poor isolation	Monitoring/Testing
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	**63.1109(h)**	DC Records – Records to be maintained for each decoking (DC) operation	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(1)	DC Records – Record of date/time/results/repairs after firebox inspection	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(1)(i)	DC Records – If burner repair takes > 1 calendar day, the reason for the delay	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(1)(ii)	DC Records – If burner repair takes > 1 calendar day, emissions estimate and justification	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(1)(iii)	DC Records – If burner repair takes > 1 day, date repair completed or schedule for repair	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(2)	DC Records – If CO2 monitoring used, record of CO2 readings and monitoring criteria	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(3)	DC Records – If T monitoring used, record of T readings and target T to reduce firing	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(4)	DC Records – If DC air monitoring used, record that decoke air not being added after DC cycle	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(5)	DC Records – If feed or steam material injection used, record that treatment injection occurred	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1109(h)(6)	DC Records – Record documenting daily DC isolation valve inspection occurred and results	Recordkeeping
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	**63.1110(e)(7)**	Reports – DC periodic reports for C=C furnace include information in (7)(i)-(iii)	Reporting
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1110(e)(7)(i)	Reports – Report instances when DC control measures were not followed	Reporting
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1110(e)(7)(ii)	Reports – Report instances when isolation valve inspections were not performed	Reporting
Furnace Decoking	GRP-OL3DK	OL3-DK1, OL3-DK2	63.1110(e)(7)(iii)	Reports – Report instances when isolation valve repairs exceeded 1 calendar day	Reporting

Appendix D7 - OP-2 Table 2 Revision 10 - New EMACT RTR Regulatory Citations for Source ID OL3-CTWR - SOP Index 63XX-1

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
Heat Exchange Systems	NA	OL3-CTWR	**63.1103(e)(3) - Table 7(h)**	For heat exchange systems in OHAP service comply with 40 CFR 63 Subpart XX requirements	Requirement
Heat Exchange Systems	NA	OL3-CTWR	**63.1085(e)**	Post-RTR must now monitor for strippable hydrocarbons per 63.1086(e)	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	**63.1085(f)**	Post-RTR must now repair leaks per 63.1087(c)-(d) unless DOR per 63.1088(d)	Requirement
Heat Exchange Systems	NA	OL3-CTWR	**63.1086(e)**	Post-RTR must perform monitoring of each affected HES per (e)(1)-(5)	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(1)	Post-RTR identifies monitoring locations for closed-loop recirculating HES in (e)(1)(i) or (ii)	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(1)(i)	Post-RTR monitor each CT return line or any representative riser prior to exposure to air	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(1)(ii)	Post-RTR monitor HE exit lines so each HE or group of HEs in HES is covered by the location	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(2)	Post-RTR identifies monitoring locations for once-through HES	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(3)	Post-RTR comply with either strippable organic action level or mass emission rate action level	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(3)(i)	Post-RTR use Modified El Paso Method (MEPM) to monitor strippable organic using an FID	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(3)(ii)	Post-RTR convert MEPM readings to mass emission rates using calculations in MEPM	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)	Post-RTR comply with monitoring frequency and Leak Action Level (LAL) in (e)(4)(i)-(iii)	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)(i)	Post-RTR existing source monitor quarterly – if leaking HES monitor monthly at specified LAL	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)(ii)	Post-RTR intermediate source monitor per (e)(4)(ii)(A)-(B)	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)(ii)(A)	Post-RTR monitor weekly for 6 months, then monthly – must monitor weekly if leaking HES	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)(ii)(B)	Post-RTR monitor weekly for 6 months, then monthly – must monitor weekly if leaking HES	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(4)(iii)	Post-RTR new source monitor weekly for 6 months, then monthly – monitor weekly if HES leaks	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(5)	Post-RTR leak definition is per (5)(i)-(ii)	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1086(e)(5)(ii)	Post-RTR recirculating HES leak parameter is stripped organic concentration from MEPM	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	**63.1087(c)**	Post-RTR if HE leak detected must repair leak to below action level within 45 days unless DOR	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1087(c)(1)	Post-RTR leak repair option 1 = physical modifications to HE, like welding or tube replacement	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1087(c)(2)	Post-RTR leak repair option 2 = blocking the leaking tube within the HE	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1087(c)(3)	Post-RTR leak repair option 3 = changing pressure so water flows into process fluid	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1087(c)(4)	Post-RTR leak repair option 4 = replace the HE or HE tube bundle	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1087(c)(5)	Post-RTR leak repair option 5 = isolating, bypassing or otherwise removing HE from service	Requirement
Heat Exchange Systems	NA	OL3-CTWR	**63.1087(d)**	Post-RTR if leak found in CW return line, monitor HEs and HE groups to isolate leak source	Monitoring/Testing
Heat Exchange Systems	NA	OL3-CTWR	**63.1088(d)**	Post-RTR DOR – May delay repair if either (d)(1) or (2) is met and leak < DOR action level in (3)	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1088(d)(1)	Post-RTR DOR – OK if fix infeasible w/o shutdown – if leak > DOR action level, fix within 30 days	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1088(d)(2)	Post-RTR DOR – No parts/staff to fix leak - if leak > DOR action level, fix within 30 days	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1088(d)(3)	Post-RTR DOR – DOR action level 62 ppmv; is < 10K gpm circulation, DOR action level = 1.8 kg/hr	Requirement
Heat Exchange Systems	NA	OL3-CTWR	63.1088(d)(3)(ii)	Post-RTR DOR – DOR rules for recirculating HES	Requirement
Heat Exchange Systems	NA	OL3-CTWR	**63.1089(d)**	Post RTR HE Records – keep documentation of DOR as per (d)(1)-(4)	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(1)	Post RTR HE Records – document reason for DOR	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(2)	Post RTR HE Records – document schedule for completing repair as soon as practical	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(3)	Post RTR HE Records – document date leak found and all subsequent monitoring during DOR	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(4)	Post RTR HE Records – document total organic emissions from HES for each DOR interval	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(4)(i)	Post RTR HE Records – allowable methods for estimating total organic emissions from leak	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(4)(ii)	Post RTR HE Records - allowable methods for estimating total organic emissions from leak	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	63.1089(d)(4)(iii)	Post RTR HE Records - allowable methods for estimating total organic emissions from leak	Recordkeeping
Heat Exchange Systems	NA	OL3-CTWR	**63.1090**	Post RTR HE Reports – For each DOR, report delay in semiannual (periodic) report	Reporting
Heat Exchange Systems	NA	OL3-CTWR	**63.1090(f)**	Post RTR HE Reports – Periodic reports must contain information in (f)(1)-(5)	Reporting
Heat Exchange Systems	NA	OL3-CTWR	63.1090(f)(1)	Post RTR HE Reports – Number of HES subject to leak monitoring	Reporting
Heat Exchange Systems	NA	OL3-CTWR	63.1090(f)(2)	Post RTR HE Reports – Number of HES found to be leaking during reporting period	Reporting
Heat Exchange Systems	NA	OL3-CTWR	63.1090(f)(3)	Post RTR HE Reports – Information to include for each monitored leak > leak action level	Reporting
Heat Exchange Systems	NA	OL3-CTWR	63.1090(f)(4)	Post RTR HE Reports – Information to include for all leaks repaired (including DOR) during period	Reporting
Heat Exchange Systems	NA	OL3-CTWR	63.1090(f)(5)	Post RTR HE Reports – Information to include for DOR leaks during reporting period	Requirement

Appendix D8 - OP-2 Table 2 Revision 11 - New EMACT RTR Regulatory Citations for Source ID OL3-EMPU - SOP Index 63YY-14

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
EMPU	NA	OL3-EMPU	**63.1103(e)(3)**	Comply with MACT YY Table 7 for SVs, PVs, TRs	Requirement
EMPU	NA	OL3-EMPU	**63.1103(e)(9)**	SSM – Startup, Shutdown and Malfunction (SSI	Requirement
EMPU	NA	OL3-EMPU	**63.1108(a)(4)(i)**	Post RTR, emission limits and parameter range	Requirement
EMPU	NA	OL3-EMPU	63.1108(a)(4)(ii)	General duty to follow good air pollution contr	Requirement
EMPU	NA	OL3-EMPU	63.1108(a)(6)	Malfunctions shall be corrected as soon as pra	Requirement
EMPU	NA	OL3-EMPU	63.1108(a)(7)	Operations and maintenance requirements un	Requirement
EMPU	NA	OL3-EMPU	**63.1108(b)(1)(ii)**	Post RTR, there are no longer any excused excu	Monitoring/Testing
EMPU	NA	OL3-EMPU	63.1108(b)(2)	Post RTR no excused excursions of CPMS excep	Monitoring/Testing
EMPU	NA	OL3-EMPU	63.1108(b)(3)	Must follow acceptable operation and mainter	Requirement
EMPU	NA	OL3-EMPU	63.1108(b)(4)(i)	Applicability assessments using testing must pe	Monitoring/Testing
EMPU	NA	OL3-EMPU	63.1108(b)(4)(ii)(B)	Post RTR performance tests must be conducte	Monitoring/Testing
EMPU	NA	OL3-EMPU	**63.1110(a)**	Reports – Submit reports specified in (a)(1)-(8)	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(4)	Reports - Notification of Compliance Status (NC	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(5)	Reports - Periodic Reports per 63.1110(e)	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(8)	Reports - Submit other reports as specified else	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(i)	Reports – Post RTR, submit any performance te	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(i)(A)	Reports – If possible, submit performance test	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(i)(B)	Reports – If data does not fit ERT, submit such	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(i)(C)	Reports – For CBI, submit performance test res	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(ii)	Reports – Post RTR submit NOCS and periodic r	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)	Reports – Provisions for non-submittal of repo	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(A)	Reports – Must have been precluded from acc	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(B)	Reports – Outage must have occurred with the	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(C)	Reports – Outage may be either planned or un	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(D)	Reports – Submit notification to EPA ASAP	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(E)	Reports – Contents of required notification rep	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(F)	Reports – Must accept deadline extension sole	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iii)(G)	Reports – Notification report must be submitte	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)	Reports – Provisions for claiming force majeure	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)(A)	Reports – Force majeure event occurred with t	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)(B)	Reports – Submit notification to EPA ASAP	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)(C)	Reports – Contents of required notification rep	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)(D)	Reports – Must accept deadline extension sole	Reporting
EMPU	NA	OL3-EMPU	63.1110(a)(10)(iv)(E)	Reports – Notification report must be submitte	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)	Reports – NOCS meet (d)(1)(i)-(ii). C=C plants a	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)(i)	Reports – Except for (d)(1)(iv)-(v), submit as pe	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)(iv)	Reports – NOCS information required for C=C p	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)(v)	Reports – NOCS information required for PRDs	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)(v)(A)	Reports – Information on PRD monitoring syste	Reporting
EMPU	NA	OL3-EMPU	63.1110(d)(1)(v)(B)	Reports – Information on prevention measures	Reporting
EMPU	NA	OL3-EMPU	63.1110(e)(1)	Reports – Periodic reports as per subparts exce	Reporting
EMPU	NA	OL3-EMPU	63.1110(e)(2)	Reports – Periodic reports due 60 days after ea	Reporting
EMPU	NA	OL3-EMPU	63.1110(e)(3)	Reports – Information submitted in Title V repo	Reporting
EMPU	NA	OL3-EMPU	63.1110(f)	Reports – All reports must contain information	Reporting
EMPU	NA	OL3-EMPU	63.1110(f)(1)	Reports – Name, address and telephone numb	Reporting

Appendix D8 - OP-2 Table 2 Revision 11 - New EMACT RTR Regulatory Citations for Source ID OL3-EMPU - SOP Index 63YY-14

Types of Affected Source(s)	Source Group ID(s)	Unit ID(s)	Regulatory Citation	Requirement Description	Requirement Type
EMPU	NA	OL3-EMPU	63.1110(f)(2)	Reports – Name, address and telephone numb	Reporting
EMPU	NA	OL3-EMPU	63.1110(f)(3)	Reports – Address (physical location) of the fac	Reporting
EMPU	NA	OL3-EMPU	63.1110(f)(4)	Reports – Identification of each affected sourc	Reporting
EMPU	NA	OL3-EMPU	63.1110(g)(1)	Reports – Submit reports both via CEDRI and h	Reporting
EMPU	NA	OL3-EMPU	63.1110(g)(2)	Reports – OK to provide EPA with copy of repo	Reporting
EMPU	NA	OL3-EMPU	**63.1111(c)**	Post-RTR Malfunction R&R – After July 6, 2023	Recordkeeping
EMPU	NA	OL3-EMPU	63.1111(c)(1)	Post-RTR Malfunction R&R – Keep malfunction	Recordkeeping
EMPU	NA	OL3-EMPU	63.1111(c)(1)(i)	Post-RTR Malfunction R&R – Record of each m	Recordkeeping
EMPU	NA	OL3-EMPU	63.1111(c)(1)(ii)	Post-RTR Malfunction R&R – Record of affecte	Recordkeeping
EMPU	NA	OL3-EMPU	63.1111(c)(1)(iii)	Post-RTR Malfunction R&R – Record of affecte	Recordkeeping
EMPU	NA	OL3-EMPU	**63.1111(c)(2)**	Post-RTR Malfunction R&R – Report each affec	Reporting

APPENDIX E UNIT ATTRIBUTES FORMS OP-UA3, OP-UA6, OP-UA7, OP-UA12, OP-UA15

Storage Tank/Vessel Attributes
Form OP-UA3 (Page 3)
Federal Operating Permit Program
Table 3: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels
(Including Petroleum Liquid Storage Vessels)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP/GOP Index No.	Product Stored	Storage Capacity	WW Tank Control	Maximum TVP	Storage Vessel Description	AMEL ID No.	Guidepole	Reid Vapor Pressure	Control Device ID No.
T-1152	60KB-3	VOL	10-							
T-1253	60KB-3	VOL	10-							
T-2451	60KB-3	VOL	10-							

Storage Tank/Vessel Attributes
Form OP-UA3 (Page 4)
Federal Operating Permit Program
Table 4a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Storage of Volatile Organic Compounds (VOCs)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP/GOP Index No.	Alternate Control Requirement	ACR ID No.	Product Stored	Storage Capacity	Throughput	Potential to Emit	Uncontrolled Emissions
T-1152	R5112-3	NO		VOC2	C1K-			
T-1253	R5112-3	NO		VOC2	C1K-			
T-2451	R5112-3	NO		VOC2	C1K-			

Boiler/Steam Generator/Steam Generating Unit Attributes
Form OP-UA6 (Page 37)
Federal Operating Permit Program
Table 14a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)
Subpart DDDDD: Industrial, Commercial, and Institutional Boilers
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP/GOP Index No.	Commence	Table Applicability	HCl Emission	HCl-CMS
OL3-GPBOIL	63DDDDD-1	NEW	T3.1TS		

Texas Commission on Environmental Quality
Flare Attributes
Form OP-UA7 (Page 7)
Federal Operating Permit Program
Table 6: Title Code of Federal Regulations Part 63 (40 CFR Part 63)
Subpart CC, National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries

Date	Permit No.:	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Flare Applicability	Operating Limits	AMEL ID No.	Flare Tip Velocity	Perimeter Assist Air
GRP-ESAF	63YY-8	OTHER	REGOP		60-400	NONE

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 22)
Federal Operating Permit Program
Table 3a: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)
Subpart V: National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

		Title 40 CFR Part 61, Subpart V			Fugitive Unit	Component	
		Any Component					
Unit ID No.	SOP Index No.	Vacuum Service	VHAP Service	Pumps	AMEL	AMEL ID No.	Complying with § 61.242-2
OL3-FUG	61V-1	NO	YES	YES	NO		YES

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 23)
Federal Operating Permit Program
Table 3b: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)
Subpart V: National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 61, Subpart V Fugitive Unit Components (continued)			
		Compressors	AMEL	AMEL ID No.	Complying with § 61.242-3
OL3-FUG	61V-1	YES	NO		YES

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 24)
Federal Operating Permit Program
Table 3c: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)
Subpart V: National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

		Title 40 CFR Part 61, Subpart V Fugitive Unit Components (continued)							
					Pressure Relief Device				
Unit ID No.	SOP Index No.	Gas/Vapor Service	AMEL	AMEL ID No.	Complying with § 61.242-4	Liquid Service	AMEL	AMEL ID No.	Complying with § 61.242-8
OL3-FUG	61V-1	YES	NO		YES	NO			

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 25)
Federal Operating Permit Program
Table 3d: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)
Subpart V: National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

		Title 40 CFR Part 61, Subpart V Fugitive Unit Components (continued)							
Unit ID No.	SOP Index No.	Sampling Connection Systems	AMEL	AMEL ID No.	Complying with § 61.242-5	Open-ended Valves or Lines	AMEL	AMEL ID No.	Complying with § 61.242-6
OL3-FUG	61V-1	YES	NO		YES	YES	NO		YES

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 26)
Federal Operating Permit Program
Table 3e: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)
Subpart V: National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 61, Subpart V Fugitive Unit Components (continued)							
		Valves	AMEL	AMEL ID No.	Complying with § 61.242-7	Flanges and Other Connectors	AMEL	AMEL ID No.	Complying with § 61.242-8
OL3-FUG	61V-1	YES	NO		YES	YES	NO		YES

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 27)
Federal Operating Permit Program
Table 3f: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)
Subpart V: National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 61, Subpart V Fugitive Unit Components (continued)			
		Product Accumulator Vessels	AMEL	AMEL ID No.	Complying with § 61.242-9
OL3-FUG	61V-1	NO			

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 28)
Federal Operating Permit Program
Table 3g: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)
Subpart V: National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 61, Subpart V Fugitive Unit Components (continued) Closed-Vent Systems and Control Devices				
		Vapor Recovery System	AMEL	AMEL ID No.	Control Device ID No.	Complying with § 61.242-11(b)
OL3-FUG	61V-1	NO				

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 29)
Federal Operating Permit Program
Table 3h: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)
Subpart V: National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 61, Subpart V Fugitive Unit Components (continued)				
		Closed-Vent Systems and Control Devices				
		Enclosed Combustion Device	AMEL	AMEL ID No.	Complying with § 61.242-11(c)	Control Device ID No.
OL3-FUG	61V-1	NO				

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 30)
Federal Operating Permit Program
Table 3i: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)
Subpart V: National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

		Title 40 CFR Part 61, Subpart V Fugitive Unit Components (continued)				
		Closed-Vent Systems and Control Devices (continued)				
Unit ID. No.	SOP Index No.	Flare	AMEL	AMEL ID No.	Complying with § 61.242-11(d)	Control Device ID No.
OL3-FUG	61V-1	YES	NO		YES	GRP-ESAF

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 31)
Federal Operating Permit Program
Table 3j: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)
Subpart V: National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

		Title 40 CFR Part 61, Subpart V Fugitive Unit Components (continued)			
		Closed-Vent Systems and Control Devices (continued)			
Unit ID No.	SOP Index No.	AMEL	AMEL ID No.	Complying with § 61.242-11(f)(1)	Title 40 CFR Part 61, Subpart V Fugitive Unit Description
OL3-FUG	61V-1	NO		YES	Process Fugitives

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 145)
Federal Operating Permit Program
Table 17a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Produces Chemicals	Affected Facility	Construction/Modification Date	Compliance Option	Design Capacity	Facility Type
OL3-FUG	60VVa-1	YES	YES	06+	60VVA	1000+	OTHER

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 146)
Federal Operating Permit Program
Table 17b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 60, Subpart VVa Fugitive Unit Components			
		Pumps			
		Light Liquid Service	EEL	EEL ID No.	Complying with 60.482-2a
OL3-FUG	60VVa-1	YES	NO		YES

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 147)
Federal Operating Permit Program
Table 17c: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

		Title 40 CFR Part 60, Subpart VVa Fugitive Unit Components (continued)				
		Compressor				Pressure Relief Devices
Unit ID No.	SOP Index No.	Compressor	EEL	EEL ID No.	Complying with 60.482-3a	Gas/Vapor Service
OL3-FUG	60VVa-1	YES	NO		YES	YES

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 148)
Federal Operating Permit Program
Table 17d: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

		Title 40 CFR Part VVa Fugitive Unit Components (continued)							
		Sampling Connection		Connection System		Valves			
Unit ID No.	SOP Index No.	Sampling Connection	EEL	EEL ID No.	Complying with 60.482-5a	Open-Ended	EEL	EEL ID No.	Complying with 60.482-6a
OL3-FUG	60VVa-1	YES	NO		YES	YES			YES

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 149)
Federal Operating Permit Program
Table 17e: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 60, Subpart VVa Fugitive Unit Components (continued)				
		Valves (continued)				
		Gas/Vapor or Light Liquid Service	2.0%	EEL	EEL ID No.	Complying with 60.482-7a
OL3-FUG	60VVa-1	YES	NO	NO		YES

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 150)
Federal Operating Permit Program
Table 17f: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 60, Subpart VVa Fugitive Unit Components (continued)							
		Pumps				Valves			
		Heavy Liquid Service	EEL	EEL ID No.	Complying with 60.482-8a	Heavy Liquid Service	EEL	EEL ID No.	Complying with 60.482-8a
OL3-FUG	60VVa-1	NO	NO			NO	NO		

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 151)
Federal Operating Permit Program
Table 17g: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

		Title 40 CFR Part 60, Subpart VVa Fugitive Unit Components (continued)							
		Pressure Relief Devices				Connectors			
Unit ID No.	SOP Index No.	Heavy or Light Liquid Service	EEL	EEL ID No.	Complying with 60.482-8a	Heavy Liquid Service	EEL	EEL ID No.	Complying with 60.482-8a
OL3-FUG	60VVa-1	YES	NO		YES	NO	NO		

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 152)
Federal Operating Permit Program
Table 17h: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 60, Subpart VVa Fugitive Unit Components (continued)				
		Closed-Vent Systems and Control Devices				
		Vapor Recovery System	EEL	EEL ID No.	Complying with 60.482-10a	Control Device ID.
OL3-FUG	60VVa-1	NO	NO			

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 153)
Federal Operating Permit Program
Table 17i: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance For Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

		Title 40 CFR Part 60, Subpart VVa Fugitive Unit Components (continued)				
		Closed Vent Systems and Control Devices (continued)				
Unit ID No.	SOP Index No.	Enclosed Combustion Device	EEL	EEL ID No.	Complying With 60.482-10a	Control Device ID.
OL3-FUG	60VVa-1	NO	NO			

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 154)
Federal Operating Permit Program
Table 17j: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 60, Subpart VVa Fugitive Unit Components (continued)				
		Control Devices				
		Flare	EEL	EEL ID No.	Complying with 60.482-10a	Control Device ID.
OL3-FUG	60VVa-1	YES	NO		YES	GRP-ESAF

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 155)
Federal Operating Permit Program
Table 17k: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 60, Subpart VVa Fugitive Unit Components (continued)				
		Control Devices				Connectors
		CVS	EEL	EEL ID No.	Complying with 60.482-10a	Gas/Vapor or Light Liquid Service
OL3-FUG	60VVa-1	NO	NO			YES

Fugitive Emission Unit Attributes
Form OP-UA12 (Page 156)
Federal Operating Permit Program
Table 17l: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Unit ID No.	SOP Index No.	Title 40 CFR Part 60, Subpart VVa Fugitive Unit Components (continued) Title 40 CFR Part 60, Subpart VVa Fugitive Unit Description
OL3-FUG	60VVa-1	Process Fugitives

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes
Form OP-UA15 (Page 1)
Federal Operating Permit Program
Table 1a: Title 30 Texas Administrative Code Chapter 111 (30 TAC Chapter 111)
Subchapter A: Visible Emissions
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Emission Point ID No.	SOP/GOP Index No.	Alternate Opacity Limitation	AOL ID No.	Vent Source	Opacity Monitoring System	Construction Date	Effluent Flow Rate
GRP-OL3DK	R1111-2	NO		OTHER	NONE	72+	100-

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes
Form OP-UA15 (Page 3)
Federal Operating Permit Program
Table 2a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Vent Gas Control
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Emission Point ID No.	SOP/GOP Index No.	Chapter 115 Division	Combustion Exhaust	Vent Type	Total Uncontrolled VOC Weight	Combined 24-Hour VOC Weight	VOC Concentration	VOC Concentration or Emission Rate at Maximum Operating Conditions
GRP-OL3DK	R5121-2	NO	NO	CATREG	5-			
GRP-ESAF	R5121-1	NO	NO	CLASVOC		100+	30K+	

Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes
Form OP-UA15 (Page 4)
Federal Operating Permit Program
Table 2b: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Vent Gas Control
Texas Commission on Environmental Quality

Date	Permit No.	Regulated Entity No.
02/03/2025	O4165	RN100218973

Emission Point ID No.	SOP Index No.	Alternate Control Requirement	ACR ID No.	Control Device Type	Control Device ID No.
GRP-ESAF	R5121-1	NONE		FLARE	GRP-ESAF

APPENDIX F ALTERNATIVE METHODS OF COMPLIANCE (AMOC) NOS. 213, 66, AND 234

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 23, 2022

MR RICK CRABTREE
VICE PRESIDENT GENERAL MANAGER
FORMOSA PLASTICS CORPORATION TEXAS
PO BOX 700
POINT COMFORT TX 77978-0700

Re: Alternative Method of Compliance (AMOC) No. 213
Formosa Point Comfort
EMACT and MON Flare Extension
Regulated Entity Number: RN100218973
Customer Reference Number: CN600130017
Associated Permit Numbers: 19168, 19200, 19201, 20203, 40157, 91780, 107518, PSDTX1232, O1956, O1957, O1958, and O4165

Dear Mr. Crabtree:

This correspondence is in response to Formosa Plastics Corporation, Texas's (Formosa's) June 30, 2022 request for an extension to comply with the smokeless flare requirements and several items which are currently under reconsideration by EPA of the updated 40 CFR Part 63, Subpart YY Ethylene Manufacturing Process Units/Generic Maximum Achievable Control Technology Standards (EMACT) and Subpart FFFF Miscellaneous Organic Chemical Manufacturing (MON).

We understand that Formosa is requesting a 1-year extension under §63.6(i)(3) and §63.1112(a) from the visible emissions (smokeless) compliance requirements during malfunctions and upsets as required by §§ 63.670(c), 63.1103(e)(4), and 63.2450(e)(5). This request is based on the status of the Flare Improvement Project and continued efforts to permit, construct, and operate the new enclosed ground flares (EGFs) (EPNs EGF 1, EGF 2, EGF 3, and EGF 4), as well as substantial piping changes. We also understand that Formosa is requesting extensions on several items in the EMACT and MON which are, or may be, under reconsideration by the U.S. Environmental Protection Agency (EPA).

After review of the information provided, the Texas Commission on Environmental Quality (TCEQ) Executive Director has made a final decision to approve a portion of your AMOC request. The 1-year extension from the flare visible emissions requirements during malfunctions and upsets is granted under the following:

1) All flares will be compliant with smokeless operation requirements (§§ 63.670(c), 63.1103(e)(4), and 63.2450(e)(5) as applicable) at all times (except during limited periods addressed within the provisions of 40 CFR §63.670(o)):
   a. Olefins 1 (OL1) sources to be controlled by Flares 1018, EGF1, and EGF2 are applicable to the EMACT and will comply by 7/6/2024 or when Flares EGF1 and EGF2 both have completed shakedown and are ready to burn regulated material, whichever occurs first.
   b. Polypropylene I (PPI), High Density Polyethylene I (HDPE I), and Linear Low-Density Polyethylene (LLDPE) sources to be controlled by Flares 1018, EGF1, and EGF2 are applicable to the MON and will comply by 8/12/2024 or when both Flares EGF1 and EGF2 have completed shakedown and are ready to burn regulated material, whichever occurs first.
   c. Olefins 2 (OL2) sources to be controlled by Flares 1067, EGF3, and EGF4 are applicable to the EMACT and will comply by 7/6/2024 or when Flares EGF3 and EGF4 both have completed shakedown and are ready to burn regulated material, whichever occurs first.

d. Olefins 3 (OL3) sources to be controlled by Flares OL3-A, B & C, EGF3, & EGF4 are applicable to the EMACT and will comply by 7/6/2024 or when both Flares EGF3 & EGF4 have completed shakedown and are ready to burn regulated material, whichever occurs first.
e. Polypropylene II (PPII) and High Density Polyethylene II (HDPE II) sources to be controlled by Flares 1067, EGF3, and EGF4 are applicable to the MON and will comply by 8/12/2024 or when both EGF3 and EGF4 have completed shakedown and are ready to burn regulated material, whichever occurs first.

2) Progress Reports on ground flares construction and start of operation status should be submitted at least every 6 months, along with a final notification when full compliance is achieved for all flares.

The request for the extension of additional items in the EMACT and MON are not being acted upon by the TCEQ at this time to allow for EPA's reconsideration process to come to a conclusion. If EPA's future rule proposal does not address these issues, the June 30, 2022 initial submittal date of this AMOC will be considered as meeting the 120-day deadline under §63.6(i)(4)(i)(B) for any MON-related extensions and the 12-month deadline of § 63.1112(a)(4)(i)(B) for any EMACT-related extensions and the company may submit a revision to this AMOC at that time.

The TCEQ has been delegated authority to enforce the above cited standards and is authorized to approve this AMOC. You are reminded that approval of any AMOC shall not abrogate the Executive Director or Administrator's authority under the Act or in any way prohibit later canceling the AMOC. By copy of this letter, we are informing the Environmental Protection Agency, Region 6, of this decision as required by TCEQ's delegation of authority.

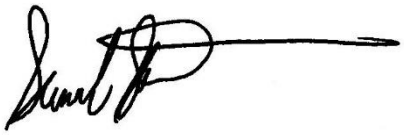
This AMOC approval may supersede certain requirements or representations in Permit Nos. 19168, 19200, 19201, 20203, 40157, 91780, 107518, and PSDTX1232. To ensure effective and consistent enforceability, we request that Formosa incorporate this AMOC into the pending permit amendment applications (Project Nos. 336050, 336051, 336052, 336053, 336054, 336055, and 336056) no later than 30 days after this approval.

This approval may also change applicable requirements for the site, which are identified in the site operating permit (SOP) O1956, O1957, O1958, and O4165. The TCEQ recommends the submittal of a SOP administrative revision if any changes are necessary. Changes meeting the criteria for an administrative revision can be operated before issuance of the revision if a complete application is submitted to the TCEQ and this information is maintained with the SOP records at the site.

If you need further information or have any questions, please contact Ms. Anne Inman, P.E. at (512) 239-1276 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Re: Permit Numbers: 19168, 19200, 19201, 20203, 40157, 91780, 107518, PSDTX1232, O1956, O1957, O1958, and O4165

Sincerely,



Samuel Short, Deputy Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

cc: Air Section Manager, Region 14 - Corpus Christi
Jesse E. Chacon, P.E., Manager, Operating Permits Section, Air Permits Division, OA: MC-163
Rebecca Partee, Manager, Chemical New Source Review Permits Section, Air Permits Division, OA: MC-163
Air Permits Section Chief, New Source Review Section (6PD-R), U.S. Environmental Protection Agency, Region 6, Dallas

Project Number: 343843

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 14, 2016

MR RICK CRABTREE
ASSISTANT GENERAL MANAGER
FORMOSA PLASTICS CORPORATION TEXAS
PO BOX 700
POINT COMFORT TX 77978-0700

Re: Alternative Method of Compliance (AMOC) No. 66
Alternative Monitoring For Cooling Towers
Formosa Point Comfort Plant
Regulated Entity Number: RN100218973
Customer Reference Number: CN600130017
Associated Permit Numbers: 7699, 19166, 19167, 19168, 19198, 19199, 19200, 19201, 20203, 40157, 76044, 76305, 91780, 107518, 107520, 127838, 128752, HAP10, PSDTX1053, PSDTX1058, PSDTX1222, PSDTX1224, PSDTX1226, PSDTX1232, PSDTX1234, PSDTX1237, PSDTX1238, PSDTX1240, PSDTX1383, PSDTX1384, PSDTX226M7, PSDTX760M9, O1484, O1951, O1953, O1954, O1956, O1957, O1958, O3409, and O3421

Dear Mr. Crabtree:

This correspondence is in response to Formosa Plastics Corporation, Texas's (Formosa's) request for Alternative Monitoring for all cooling towers (CT) at the Formosa Point Comfort Plant. The AMOC is used to comply with requirements for sampling and analysis of VOCs in cooling tower feed water and makeup water.

We understand that Formosa is requesting **clarification and confirmation of the alternative VOC sampling procedure for all authorized CT at the site installed on similar product processes (see Attachment 1). This alternative method was previously approved for Formosa on** December 2, 1992, January 11, 1996, and August 1997.

The alternative VOC sampling (referenced in historical correspondence as FPC TX VOC IN WATER AND WASTEWATER) is equivalent to Test Method 8020A. The method is detailed in Attachment 2 and should provide representative concentrations of non-methane hydrocarbons to comply with the above-referenced permits. This alternative method does not apply to any requirements that may in 40 Code of Federal Regulations Part 60, New Source Performance Standards (NSPS), 40 Code of Federal Regulations Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP), or 40 Code of Federal Regulations Part 63, Maximum Achievable Control Technology (MACT) Standards for Hazardous Air Pollutants.

Re: AMOC #66

The Texas Commission on Environmental Quality (TCEQ) Executive Director has made a final decision to approve your AMOC request. You are reminded that approval of any AMOC shall not abrogate the Executive Director or Administrator's authority under the Act or in any way prohibit later canceling the AMOC.

This AMOC approval may supersede certain requirements or representations in Permit Nos. 7699, 19166, 19167, 19168, 19198, 19199, 19200, 19201, 20203, 40157, 76044, 76305, 91780, 107518, 107520, 127838, 128752, HAP10, PSDTX1053, PSDTX1058, PSDTX1222, PSDTX1224, PSDTX1226, PSDTX1232, PSDTX1234, PSDTX1237, PSDTX1238, PSDTX1240, PSDTX1383, PSDTX1384, PSDTX226M7, and PSDTX760M9. To ensure effective and consistent enforceability, we request that Formosa incorporate this AMOC into the permit(s) through submittal of alteration(s) no later than 90 days after this approval, if not already included.

This approval may also change applicable requirements for the site, which are identified in the site operating permits (SOP) O1484, O1951, O1953, O1954, O1956, O1957, O1958, O3409, and O3421. The TCEQ recommends the submittal of a SOP administrative revision if any changes are necessary. Changes meeting the criteria for an administrative revision can be operated before issuance of the revision if a complete application is submitted to the TCEQ and this information is maintained with the SOP records at the site.

If you need further information or have any questions, please contact Ms. Anne Inman, P.E. at (512) 239-1276 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the TCEQ.

Sincerely,

Michael Wilson, P.E., Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

cc: Air Permits Section Chief, New Source Review Section (6PD-R), U.S. Environmental Protection Agency, Region 6, Dallas

Project Number: 255806

bcc: Air Section Manager, Region 14 - Corpus Christi
Rebecca Partee, Manager, Chemical Section, Air Permits Division, OA: MC-163

Attachment 1 – Summary of Cooling Towers and Authorizations				
Permit Nos.	**Type of Process**	**Plant**	**EPNs**	**Previous Approval**
19166, HAP10, PSDTX760M9, O1951	Inorganic	Utilities Plant	Not identified on MAERT	12/2/1992
19167, O1953	Inorganic	Caustic Chlorine Plant	Not identified on MAERT (shares with EDC-CT)	1/11/1996
76044, PSDTX1053, O3421	Inorganic	Pet Coke / Coal Fired Generation	CT-1 through CT-12	N/A
19168, PSDTX1226, O1958	Organic Olefins	Olefins I Olefins II GHU PPU FRACII	1010 1064 8801U FRACII-CT	N/A
107518, PSDTX1383 SOP PENDING	Organic Olefins	Olefins III PDH	OL3-CTWR PDH-CWTR	N/A
19201, PSDTX1232 O1957	Organic Polyolefins	HDPE I	PO-CT	1/11/1996
40157, PSDTX1222 O1957	Organic Polyolefins	HDPE II	PP2-CT	N/A
20203, PSDTX1224 O1957	Organic Polyolefins	LLDPE	LL-CT	12/2/1992
107520, PSDTX1384 SOP PENDING	Organic Polyolefins	LDPE	LD-CT	N/A
19200, PSDTX1237, O1956	Organic Polyolefins	Polypropylene I Plant (PP I)	PO-CT PP1-CT	1/11/1996
91780, PSDTX1240 O1956	Organic Polyolefins	PP II	PP20CT	N/A
127838 SOP PENDING	Organic Polyolefins	HDPE 3	PE3-12	N/A
19199, PSDTX1238 O1953	Organic Other	Ethylene Dichloride (EDC)	2C-C1 2C-C2 EDC-CT	
7699, PSDTX226M7 O1954	Organic Other	EDC Cracking, VCM, PVC	999 VW-C02 VW-C11	12/2/1992
19198, PSDTX1234 O1484	Organic Other	Ethylene Glycol (EG)	EG-CT	8/1997
128752 SOP PENDING	Organic Other	EG 2	EG2-CT	N/A
76305, PSDTX1058 O3409	Organic Other	Specialty PVC	CT-01	N/A

Attachment 2

VOC in Water and Wastewater by TACB-VOC Method Procedure

LABORATORY STANDARD OPERATING PROCEDURES

VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD

Revision Number 5

1.0 PURPOSE *

In an effort to maintain Quality, Efficiency, Safety, and Environmental Responsibility, this procedure has been developed for L.S. & Q.A. Department Operation.

2.0 SCOPE *

This method is for the analysis of water and wastewater samples containing volatile organic compounds (VOC) and non-methane hydrocarbons (NMHC). It is intended for analyzing treated and un-treated water and wastewater streams permitted in FPC expansion complex.
This method can be used to quantitate volatile organic compounds that have boiling points less than 200°C and are insoluble or slightly soluble in water.

3.0 ORGANIZATIONS AFFECTED

This procedure affects operation within the L.S. & Q.A. Department and any other department that may request this analysis.

4.0 RESPONSIBILITIES

Personnel	Responsibility
Management/Supervision	Responsible for development and implementation of the procedure, training material, and training of subordinates
QA/QC	Responsible for auditing the performance of the procedure.
Lab Technician	Responsible for knowing and performing analysis per procedure.

5.0 DEFINITIONS

VOC *Volatile Organic Compounds (VOC)* are organic compounds that have boiling points approximately less than 200°C.

6.0 KEY POINTS

Not applicable.

7.0 POLICIES *

This procedure has been developed to insure adherence to FPC Quality, Environmental, Health, and Safety Policies, FPC Corporate Total Quality Management Policies, L.S. & Q.A. Department Quality Management Plan and L.S. & Q.A. Department Quality Assurance Project Plan.

8.0 GUIDELINES

Summary

Volatile organic compounds (VOC) are extracted from sample by purge and trap techniques. Stripped sample components are swept to the gas chromatograph inlet where the individual components are detected using a flame ionization detector. The resultant peaks are summed and quantitated against external calibration curve constructed using benzene as a standard.

GC FID

Interferences

Major contaminate peaks are volatile materials in the laboratory and impurities in the inert purging or carrier gas. A trip blank prepared from organic-free regent water and carried through the sampling and handling protocol can serve as a check for any possible contamination of sample.

Safety Considerations

The use of proper gloves, safety glasses, and FRC should be exercised when using reagents. Exercise caution when working with glassware. Wipe any spills, clean area immediately and dispose of properly. Avoid skin or eye contact, inhalation or ingestion. Do not operate instrument without all protective equipment in place.

Sample Collection and Storage

- Water sample are collected in 40mL vial with a Teflon-lined septum and an open top screw-cap. Two vials per sampling event must be collected at a minimum per sample point. The containers must be filled in such manner that no air bubbles pass through the sample as the container is being filled. Should bubbling occur, the sample must be poured out and the vial refilled. Seal the vial so that no air bubbles are entrapped in it.
- Due to differing solubility and diffusion properties of gases in liquid matrices at different temperatures, it is possible for the sample to generate some headspace during storage. This headspace will appear in the form of micro-bubbles, and should not invalidate a sample for volatile analysis.
- The presence of a macro-bubble , generally indicates either improper sampling technique or a source of gas evolution within the sample, Studies conducted by the USEPA (BMSL-Ci, unpublished data) indicate that "pea-sized" bubbles (i.e. diameter < ¼ in.) did not adversely affect volatiles data. These bubbles were generally encountered in wastewater samples, which are more susceptible to variations in gas solubility than are groundwater samples.

7.0 POLICIES *

This procedure has been developed to insure adherence to FPC Quality, Environmental, Health, and Safety Policies, FPC Corporate Total Quality Management Policies, L.S. & Q.A. Department Quality Management Plan and L.S. & Q.A. Department Quality Assurance Project Plan.

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QC Requirements

QC	DESCRIPTION	FREQUENCY	CRITERIA	CORRECTIVE ACTION
MB	Method blank; Organic-free reagent water	1/10 sample	< 20 ppb Which is the amount of the lowest std.	Investigate system contamination; correct the problem and reanalyze the samples.
ICV	Initial Calibration verification. Benzene: 100 ppb.	1/10 sample	20% deviation from actual value. (80 ppb-120 ppb)	Check instrument malfunction. Correct the instrument problem and reanalyze. Perform initial calibration after the third failure.

Calculations

Deviation(%)

$$D = \frac{|X - T|}{T} \times 100$$

Where, D = percent deviation
X = the observed value for the measurement
T = "actual" value for the measurement

Precision and Accuracy

None

Reporting

1. Analytical reporting limit is 20 ppb (ug/L).
2. All verified results must be entered in LIMS and/or the appropriate non-routine log sheet upon completion.
3. For the purpose of reporting to applicable agencies, preliminary results from LIMS may be used to prevent greater than 48hr delay in reporting time.

9.0 PROCEDURES*

9.1 *Standard Preparation*

9.1.2 Calibration Standards

Fill 40 mL VOA vials with reagent water, taking care not to trap any air in the vial. Add the Calibration Standard (AS-E0004) to the vial using a clean microsyringe basing on following list to prepare the calibration standards:

	Stock solution
Blank	0.0 uL
20 ppb	0.8 uL
50 ppb	2.0 uL
100 ppb	4.0 uL
250 ppb	10.0 uL
500 ppb	20.0 uL
1000 ppb	40.0 uL

9.1.3 Initial Calibration Verification Standard: Upon opening the certified benzene standard (e.g. M502-01-10X), transfer to a 1 mL reaction vial and cap with a syringe valve. This standard may be good up to 6 months, but should be replaced if ICV fails. Fill a 40 mL VOA vial with Reagent water, taking care not to trap any air in the vial. Add 2.0 uL to the vial using a clean microsyringe for a 100 ppb std.

9.1.4 All standard preparation activities must be logged in the standards logbook.

9.2 *Instrument Setup*

9.2.1 GC/FID is configured as follows:

Inlet

Mode: split	Gas: Helium
Heater:	250 °C
Pressure:	6.9 psi
Total Flow:	102 mL/min
Split ratio:	9:1
Split Flow:	90 mL/min

Column

Mode:	Const Pressure
Pressure:	6.9 psi
Flow:	10.0 mL/min
Average Velocity:	66 cm/sec.

Oven:
Setpoint: 50 °C

Oven Maximum: 300 °C
Equilibration: 0.5 min

Oven Ramp	°C/min	Next °C	Hold min	Run time
Initial		50	2.00	2.00
Ramp 1	20.00	250	9.00	16.00
Post Run		50	0	16.00

Detector:

Heater:	280 °C
H2 flow	40.0 mL/min
Air Flow	450 ml/min
Makeup Flow (He):	25.0 mL/min
Flame:	On

9.2.2 Purge-and-Trap (OI 4560):

Purge flow	35 mL/min
Purge	11 min at 25 °C
Desorb	2 min at 180 °C
Bake	10 min at 185 °C
Transfer line	100 °C
Valve	100 °C
Sample size	5 mL
Drypurge	1min

9.3 ***Re- Calibration***

9.3.1 Recalibration is recommended once a year or when new ICV fails 20% recovery. Prior to re-calibration, GC and samplers must be baked out. Raise the GC oven temp to 250°C and bake for at least 30 min. It is also necessary to cycle the purge-and-trap through one bake cycle to ensure that there are no contaminates present in the trap. After 30 min lower GC temp to 50°C.

9.3.2 Prepare the calibration standards as outlined in 9.1.2 just prior to analysis. Load the standard vials in the correct slots of the autosampler and prepare following re-calibration sequence in the **Method and Run control window** of the Chemstation Software. Start the sequence by following steps from 9.4.4 to 9.4.9.

Re-calibration sequence:

Line	Vial	Sample Name	Method Name	Inj/Vial	Sample Type	Cal Level	Update RF	Update RT
1	1	MB (Blank)	TACB-VOC	1	Sample			
2	1	20 ppb	TACB-VOC	1	Calibration	1	Replace	No Update
3	1	50 ppb	TACB-VOC	1	Calibration	2	Replace	No Update
4	1	100 ppb	TACB-VOC	1	Calibration	3	Replace	Replace
5	1	250 ppb	TACB-VOC	1	Calibration	4	Replace	No Update
6	1	500 ppb	TACB-VOC	1	Calibration	5	Replace	No Update
6	1	1000 ppb	TACB-VOC	1	Calibration	6	Replace	No Update

9.3.3 In the **data analysis window** of the Chemstation Software, load the chromatogram for the blank (reagent water). Check to see that there are no contamination peaks. For some low level analysis, a small peak will show at the beginning of the run. This is due to a pressure change on column when the sampler injects. If a calibration exists, the run should read less than two times the lower analytical limit for the analysis.

9.3.4 Open the calibration file and check to see that there are only two significant peaks. The first peak will be the solvent or methanol peak. The peaks should be sharp with minimum tailing. If there are more than two peaks, the calibration stock or reagent water is contaminated. Correct this condition and begin the calibration again.

9.3.5 Once the calibration files are integrated, the results must be assembled in a linear calibration curve. Display the calibration curve and check that the fit is at least $R^2 > 0.990$. Calculate a new area reject from the Calibration curve plot "AREA= number value x amount + 0" (the number value is the slope of the calibration curve. The amount is 20). Enter this new area into the integration events table in the value line for each cal.

9.3.6 Calibration should be set to calculate uncalibrated peaks using compound benzene. The parameters should sum all the individual peak areas of chromatogram.

9.4 *Sample Analysis*

9.4.1 *Composite Sample*: A volumetric composite is performed by combining the chilled (4°C) samples collected during a weeklong sampling event in a chilled jar that is surrounded by ice. This must be performed quickly to prevent loss of volatile component. The sample is mixed and transferred to 40mL VOA.

Note: The volumetric composite may not reflect the true emissions over a week long period due to fluctuations in flow rate of the stream to be tested.

9.4.2 For grab samples, directly use the vial that the sample was received in.

9.4.3 Load the samples in the autosampler racks noting their positions.

9.4.4 Bring up the window **P & T 6890C (online): Method & Run control** by Click **Start / Program/HP Chemstation /Instrument online** if it is not opened on the computer monitor.

9.4.5 Click **Sequence/Load Sequence** to load an existing sequence.

9.4.6 Click **Sequence/Sequence Parameter** to change the **Subdirectory** to today's date.

9.4.7 Click **Sequence/Sequence Table** to edit the sequence at the data station.
Enter the sample information in a sequence file located in the data station. Be sure that the vial positions correspond with vial locations and the correct method is chosen for the analysis

Following sequence table is an example:

Line	Vial	Sample Name	Method Name	Inj/Vial	Sample Type
1	1	MB(Blank)	TACB-VOC	1	Sample
2	1	ICV	TACB-VOC	1	Sample
3	1	OL1 CWR 2/5	TACB-VOC	1	Sample
4	1	OL1 CWR 2/5	TACB-VOC	1	Sample
5	1	OL2 CWR 2/08	TACB-VOC	1	Sample
6	1	OL2 CWR 2/08	TACB-VOC	1	Sample
7	1	OHU CWR 2/5	TACB-VOC	1	Sample
8	1	OHU CWR 2/5	TACB-VOC	1	Sample
9	1	T971 2/1-2/7	TACB-VOC	1	Sample
10	1	3T971 2/1-2/7	TACB-VOC	1	Sample
11	1	CWTP 2/1-2/7	TACB-VOC	1	Sample
12	1	LLDPE CWR 2/5	TACB-VOC	1	Sample
13	1	MB	TACB-VOC	1	Sample
14	1	ICV	TACB-VOC	1	Sample
15	1	Sample A	TACB-VOC	1	Sample
16	1	Sample B	TACB-VOC	1	Sample

Note: Method blank and calibration verification need be run every 10 samples.

9.4.8 Press **Run Sequence** button. Now system is ready and waiting for Purge-and-trap device to start.

9.4.9 Purge-and-trap device preparation:
(1) Push **SPL** Button on the front panel, the window will show: **L551** start: end:
(2) Set the start and end positions that need match with actual sample position and run sequence, use **Arrow ON** button and **OFF** button to switch between start and end, then use keypad to key in position number.

(3) Press Enter key, then press Clear button, then press Start button to run the sequence.

9.4.10 Once data have been generated, check that the chromatograms have been integrated correctly. Samples that are 10 % out of the analytical range for the determination must be diluted and re-analyzed using the appropriate methodology (See table 1).

10.0 TRAINING REQUIREMENTS *

Personnel who perform this analysis will be required to complete the following training requirements:

Period	Requirement
Initial	SOP Training, Test, and Job Qualification
Annual Refresher and Procedure Revision	SOP Training and Test
Audit Finding	SOP Training, Test, and Job Qualification

11.0 FLOWCHART

Not applicable

12.0 REFERENCES

1. "Guidelines for preparation of Policies, Guidelines, and Procedures," FPC TQM Manual.
2. Test Method for Evaluating Solid Waste (SW-846), "Determinative Chromatographic Separations," Revision 3, March 2003, Method 8000C.
3. Test Method for Evaluating Solid Waste (SW-846), "purge and Trap for Aqueous Samples," Revision 3, May 2003, Method 5030C.
4. Test Method for Evaluating Solid Waste (SW-846), "Organic Analytes," Revision 4, February 2007, Chapter Four, Section I, (for sample storage)

13.0 RECORD RETENTION PERIOD

Records produced using this procedure will be retained for a period of no less than 5 years.

14.0 ATTACHMENTS

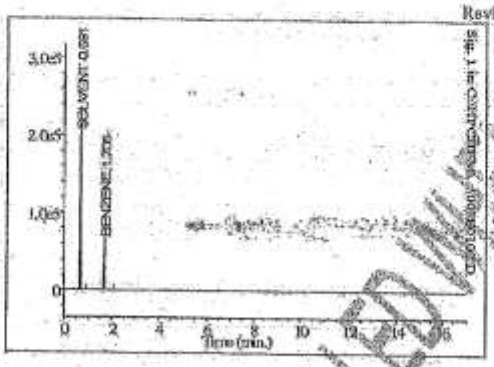
Table 1
Figure 1: Chromatogram of Calibration Standard and sample run
Attachment 1: TNRCC Approval Letter.

TABLE 1. Examples of sample dilution

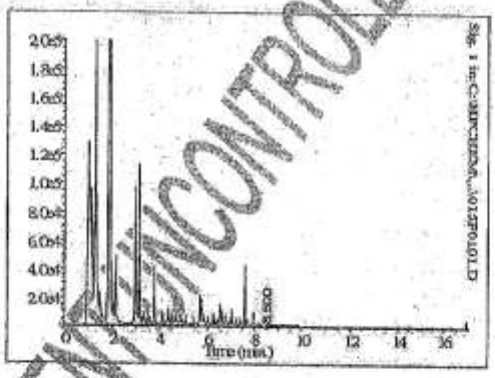
Add the required amount of high concentration sample to a 50 mL volumetric flask, and then bring level to exact 50 mL with organic-free reagent water.

Dilution factor	High concentration sample	Total volume
30000	1.67 µL	50 mL
20000	2.5 µL	50 mL
10000	5 µL	50 mL
5000	10 µL	50 mL
4000	12.5 µL	50 mL
3000	16.7 µL	50 mL
2000	25 µL	50 mL
1000	50 µL	50 mL
500	100 µL	50 mL
400	125 µL	50 mL
300	167 µL	50 mL
200	250 µL	50 mL
100	500 µL	50 mL
90	556 µL	50 mL
80	625 µL	50 mL
70	714 µL	50 mL
60	833 µL	50 mL
50	1 ml	50 mL
40	1.25 mL	50 mL
30	1.67 mL	50 mL
20	2.5 mL	50 mL
10	5 mL	50 mL
5	10 mL	50 mL
2	25 mL	50 mL

Figure 1: Sample Chromatogram
Calibration Standard Run



Sample Run



Attachment 1: TNRCC Approval Letter

The next page is a copy of the approval letter from the TNRCC.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 2, 2024

MR MIKE RIVET
EXECUTIVE DIRECTOR SITE MANAGER
FORMOSA PLASTICS CORPORATION TEXAS
PO BOX 700
POINT COMFORT TX 77978-0700

Re: Alternative Method of Compliance (AMOC) No. 234
Olefins 1, 2, and 3 Units
Federal Semi-annual Reporting Alignment Request
Regulated Entity Number: RN100218973
Customer Reference Number: CN600130017
Associated Permit Numbers: 19168, 107518, GHGPSDTX48, GHGPSDTX224, PSDTX1226M1, PSDTX1383M2, O1958, and O4165

Dear Mr. Rivet:

This correspondence is in response to Formosa Plastics Corporation, Texas's (FCP-TX's) January 12, 2024 request for to align semi-annual reporting for units applicable to 40 CFR 63 Subpart YY, Ethylene Manufacturing Process Units/Generic Maximum Achievable Control Technology Standards (EMACT).

The company has proposed to provide a shortened reporting cycle (December 4, 2023 to February 15, 2024 with report due by April 16, 2024). Subsequent reporting cycles shall start February 16, 2024 and cover the periods of February 16th to August 15th and August 16th to February 15th of each subsequent year, with reports due 60-days from the end of each semi-annual period.

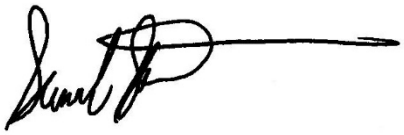
The Texas Commission on Environmental Quality (TCEQ) Executive Director has made a final decision to approve your AMOC request. The TCEQ has been delegated authority to enforce the above cited standards and is authorized to approve this AMOC. You are reminded that approval of any AMOC shall not abrogate the Executive Director or Administrator's authority under the Act or in any way prohibit later canceling the AMOC. By copy of this letter, we are informing the Environmental Protection Agency, Region 6, of this decision as required by TCEQ's delegation of authority.

This AMOC approval may supersede applicable requirements for the site identified in the site operating permits (SOPs) O1958, and O4165. The TCEQ recommends the submittal of a SOP administrative revision. Changes meeting the criteria for an administrative revision can be operated before issuance of the revision if a complete application is submitted to the TCEQ and this information is maintained with the SOP records.

If you need further information or have any questions, please contact Ms. Anne Inman, P.E. at (512) 239-1276 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Re: Permit Numbers: 19168, 107518, GHGPSDTX48, GHGPSDTX224, PSDTX1226M1, and PSDTX1383M2

Sincerely,



Samuel Short, Deputy Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

cc: Air Section Manager, Region 14 - Corpus Christi
Jesse E. Chacon, P.E., Manager, Operating Permits Section, Air Permits Division, OA: MC-163
Becky Tsuchiya, Manager, Chemical New Source Review Permits Section, Air Permits Division, OA: MC-163

Project Number: 369011

Texas Commission on Environmental Quality

Title V Existing

4165

Site Information (Regulated Entity)

What is the name of the permit area to be authorized?	OLEFINS 3 AND PROPANE DEHYDROGENATION (PDH) PLANT
County	CALHOUN
Latitude (N) (##.######)	28.688888
Longitude (W) (-###.######)	96.547222
Primary SIC Code	2821
Secondary SIC Code	
Primary NAICS Code	325110
Secondary NAICS Code	
Regulated Entity Site Information	
What is the Regulated Entity's Number (RN)?	RN100218973
What is the name of the Regulated Entity (RE)?	FORMOSA POINT COMFORT PLANT
Does the RE site have a physical address?	Yes
Physical Address	
Number and Street	201 FORMOSA DR
City	POINT COMFORT
State	TX
ZIP	77978
County	CALHOUN
Latitude (N) (##.######)	28.6888
Longitude (W) (-###.######)	-96.5472
Facility NAICS Code	
What is the primary business of this entity?	INDUSTRIAL CHEMICAL MANUFACTURING PLANT

Customer (Applicant) Information

How is this applicant associated with this site?	Owner Operator
What is the applicant's Customer Number (CN)?	CN600130017
Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	Formosa Plastics Corporation, Texas
Texas SOS Filing Number	5107506
Federal Tax ID	222355464
State Franchise Tax ID	12223554648
State Sales Tax ID	
Local Tax ID	
DUNS Number	106238165
Number of Employees	501+
Independently Owned and Operated?	Yes

Responsible Official Contact

Person TCEQ should contact for questions about this application:	
Organization Name	FORMOSA PLASTICS CORPORATION TEXAS
Prefix	MR
First	KEN
Middle	
Last	MOUNGER
Suffix	
Credentials	
Title	EXECUTIVE VICE PRESIDENT
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	9 PEACH TREE HILL RD
Routing (such as Mail Code, Dept., or Attn:)	
City	LIVINGSTON
State	NJ
ZIP	07039
Phone (###-###-####)	9737167205
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	9739948005
E-mail	tammyl@fdde.fpcusa.com

Duly Authorized Representative Contact

Person TCEQ should contact for questions about this application	
Select existing DAR contact or enter a new contact.	MIKE RIVET(FORMOSA PLASTIC...)
Organization Name	FORMOSA PLASTICS CORPORATION TEXAS
Prefix	MR
First	MIKE
Middle	
Last	RIVET
Suffix	
Credentials	
Title	ASSISTANT VICE PRESIDENT/GENERAL MANAGER
Enter new address or copy one from list	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 700
Routing (such as Mail Code, Dept., or Attn:)	
City	POINT COMFORT
State	TX

Zip	77978
Phone (###-###-####)	3619877000
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	tlasater@ftpc.fpcusa.com

Technical Contact

Person TCEQ should contact for questions about this application:	
Select existing TC contact or enter a new contact.	New Contact
Organization Name	Formosa Plastics Corporation Texas
Prefix	MS
First	LeAnn
Middle	
Last	Usoff
Suffix	
Credentials	
Title	Assistant Manager of Air Permitting
Enter new address or copy one from list:	RE Physical Address
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	PO BOX 700
Routing (such as Mail Code, Dept., or Attn:)	
City	POINT COMFORT
State	TX
ZIP	77978
Phone (###-###-####)	3619209401
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	leannu@ftpc.fpcusa.com

Title V General Information - Existing

1) Permit Type:	SOP
2) Permit Latitude Coordinate:	28 Deg 41 Min 20 Sec
3) Permit Longitude Coordinate:	96 Deg 32 Min 50 Sec
4) Is this submittal a new application or an update to an existing application?	New Application
4.1. What type of permitting action are you applying for?	Renewal
4.1.1. Are there any permits that should be voided upon issuance of this permit application through permit conversion?	No
4.1.2. Are there any permits that should be voided upon issuance of this permit application through permit consolidation?	No
5) Who will electronically sign this Title V application?	Duly Authorized Representative

6) Does this application include Acid Rain Program or Cross-State Air Pollution Rule requirements?	No

Title V Attachments Existing

Attach OP-1 (Site Information Summary)

[File Properties]

File Name	OP_1_OL3+Title+V+(O4165)+Permit+Renewal+Application-+2.03.2025.signed.pdf
Hash	8AAC7CD27C54EB7617D66F4438C4B51995774D4D5D0595C890B8774806BB609E
MIME-Type	application/pdf

Attach OP-2 (Application for Permit Revision/Renewal)

Attach OP-ACPS (Application Compliance Plan and Schedule)

Attach OP-REQ1 (Application Area-Wide Applicability Determinations and General Information)

Attach OP-REQ2 (Negative Applicable Requirement Determinations)

Attach OP-REQ3 (Applicable Requirements Summary)

Attach OP-PBRSUP (Permits by Rule Supplemental Table)

Attach OP-SUMR (Individual Unit Summary for Revisions)

Attach OP-MON (Monitoring Requirements)

Attach OP-UA (Unit Attribute) Forms

If applicable, attach OP-AR1 (Acid Rain Permit Application)

Attach OP-CRO2 (Change of Responsible Official Information)

Attach OP-DEL (Delegation of Responsible Official)

Attach any other necessary information needed to complete the permit.

An additional space to attach any other necessary information needed to complete the permit.

Expedite Title V

1) Per Texas Health and Safety Code, Section 382.05155, does the applicant want to expedite the processing of this application?	No

Certification

I certify that I am the Duly Authorized Representative for this application and that, based on information and belief formed after reasonable inquiry, the statements and information on this form are true, accurate, and complete.

1. I am Mike Rivet, the owner of the STEERS account ER093335.
2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcemer of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Title V Existing 4165.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEC

OWNER OPERATOR Signature: Mike Rivet OWNER OPERATOR

Account Number:	ER093335
Signature IP Address:	24.116.223.222
Signature Date:	2025-02-03
Signature Hash:	1D96686854B12E0F5FA241401E07955B06BD2257800F82BF7A872089D866131A
Form Hash Code at time of Signature:	9EDDF8094A7F111E0E83E0CE124C1D544AFB1DD2FF2239CBE570EF3108AEC3C4

Submission

Reference Number:	The application reference number is 752500
Submitted by:	The application was submitted by ER093335/Mike Rivet
Submitted Timestamp:	The application was submitted on 2025-02-03 at 14:44:17 CST
Submitted From:	The application was submitted from IP address 24.116.223.222
Confirmation Number:	The confirmation number is 625536
Steers Version:	The STEERS version is 6.86
Permit Number:	The permit number is 4165

Additional Information

Application Creator: This account was created by Eric Quiat