Texas Commission on Environmental Quality
INTEROFFICE MEMORANDUM

TO: Office of Chief Clerk **Date:** June 30, 2025

THRU: Amy Browning
Senior Attorney
Environmental Law Division

FROM: Katelyn Ding
Staff Attorney
Environmental Law Division

SUBJECT: Backup Documents Filed for Consideration of Hearing Requests at Agenda

Applicant: The Dow Chemical Company
Permit No.: 914 and PSDTX1642
Program: Air
Docket No.: TCEQ Docket No. 2025-0889-AIR

Enclosed please find a copy of the following documents for inclusion in the background material for this permit application:

- The final draft permit, including any special conditions or provisions, for permit nos. 914 & PSDTX1642
- Maximum Allowable Emission Rate Table (MAERT)
- The summary of the technical review of the permit application
- The preliminary determination summary for the permit application
- The Air Quality Analysis modeling audit
- The compliance summary of the applicant

Special Conditions

Permit Number 914 and PSDTX1642

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emissions Rate" and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating requirements specified in the Special Conditions.

2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than one percent are not authorized by this permit unless authorized on the maximum allowable emissions rate (MAERT). Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than one weight percent are not consistent with good practice for minimizing emissions with the exception of safety relief valves that discharge to the atmosphere only as a result of fire, or failure of utilities, or as represented in the confidential section of permit alteration dated March 10, 1994.

Federal Applicability

3. The facility (The Ethylene Unit) shall comply with all applicable requirements of the EPA regulations on: **(TBD)**

   A. Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):

      (1) Subpart A, General Provisions.

      (2) Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators.

      (3) Subpart NNN, Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.

      (4) Subpart RRR, Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

   B. National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61:

      (1) Subpart A, General Provisions.

      (2) Subpart BB, National Emission Standard for Benzene Emissions from Benzene Transfer Operations.

      (3) Subpart FF, National Emission Standard for Benzene Waste Operations.

   C. National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63:

      (1) Subpart A, General Provisions.

      (2) Subpart YY, National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards.

Emission Controls

4. Flares shall be designed and operated in accordance with the following requirements: **(TBD)(PSD)**

A. The flare system shall be designed such that the combined flare vent gas and total steam to the flare meets the 40 CFR § 63.670 specifications for minimum combustion zone net heating value and maximum tip velocity at all times that flare vent gas may be directed to the flare for more than 15 minutes. Flared gas actual exit velocity, vent gas net heating value, and flared gas combustion zone net heating value shall be determined in accordance with 40 CFR §63.670(k), §63.670(l), and §63.670(m) on a 15-minute block average and recorded at least once every 15 minutes.

B. The flare shall be operated with pilot flames present at all times flare vent gas may be directed to the flare. The pilot flames shall be continuously monitored by a thermocouple, infrared monitor, or ultraviolet monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.

C. Flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours, demonstrated and recorded per the requirements of §63.670(h).

D. The permit holder shall install flow monitors that continuously measure, calculate, and record the total volumetric vent stream flow rate (including waste gas, purge gas, supplemental gas, and sweep gas), and shall install a monitoring system capable of determining the concentration of individual components in the flare vent gas or the net heating value of the flare vent gas. The flow monitor sensor and analyzer sample points shall be installed in the vent stream such that the total vent stream to the flare is measured and analyzed.

If one or more gas streams that combine to comprise the total flare vent gas flow are monitored separately for net heating value and flow, the 15-minute block average net heating value shall be determined separately for each measurement location and a flow-weighted average of the gas stream net heating values shall be used to determine the 15-minute block average net heating value of the cumulative flare vent gas.

The owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording the total volumetric flow rate of assist steam used with the flare.

The monitors shall be calibrated or have a calibration check performed as specified in Table 13 of the appendix to 40 CFR 63, Part CC to meet the following accuracy specifications: the vent flow monitor shall be ±20 percent of flow rate at velocities ranging from 0.03 to 0.3 meters per second (0.1 to 1 feet per second) ±5 percent of flow rate at velocities greater than 0.3 meters per second (1 feet per second), all other gas flow monitors shall be ±5 percent over the normal range of flow measured or 280 liters per minute (10 cubic feet per minute) whichever is greater, temperature monitor shall be ±1 percent over the normal range of temperature measured, expressed in degrees Celsius (C), or 2.8 degrees C, whichever is greater, and pressure monitor shall be ±5 percent over the normal operating range or 0.12 kilopascals (0.5 inches of water column), whichever is greater. For purposes of this permit, a calibration check means, at a minimum, using a second device or method to verify that the monitor is accurate as specified in the permit.

Calorimeters shall have an accuracy of at least ±2% of span and be calibrated, installed, operated, and maintained in accordance with manufacturer recommendations and as specified in Table 13 of the appendix to 40 CFR 63, Part CC, to continuously measure and record the net heating value of the vent gas sent to the flare, in British thermal units/standard cubic foot of the gas.

For determination of net heating value by gas chromatograph, the minimum accuracy shall be as specified in Performance Specification 9 of Part 60, appendix B. Composition monitoring instruments shall be calibrated, installed, operated, and maintained in accordance with manufacturer recommendations and as specified in 40 CFR §63.671(e) and Table 13 of 40 CFR Pt. 63, Subpart CC. Individual component properties specified in Table 12 of Subpart CC shall apply to net heating value calculations.

For determination of net heating value by continuous process mass spectrometer, the minimum accuracy; composition monitoring; calibration; installation; operation and maintenance shall be done in accordance with 40 CFR §63.1103(e)(4)(viii).

E. Quality assured (or valid) data must be generated during periods that the specified flare is operating. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the flare operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

F. Hourly mass emission rates shall be determined and recorded using the monitoring data collected pursuant to paragraph D of this Special Condition and the emission factors specified in the permit amendment application project 374897.

5. The following requirements apply to capture systems for the plant flare system:

A. Either conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A. Test Method 21, once a year. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

B. The control device shall not have a bypass.

or

If there is a bypass for the control device, comply with either of the following requirements:

(1) Install a flow indicator that records and verifies bypass flow at least once every fifteen minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or **(TBD)**

(2) Once a month, inspect the valves, verifying that the position of the valves and the condition of the car seals that prevent flow out the bypass.

A bypass does not include authorized analyzer vents, highpoint bleeder vents, low point drains, or rupture discs upstream of pressure relief valves if the pressure between the disc and relief valve is monitored and recorded at least weekly. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when it is required to be in service per this permit.

C. The date and results of each inspection performed shall be recorded. If the results of any inspection are not satisfactory, the deficiencies shall be recorded and the permit holder shall promptly take necessary corrective action, recording each action with the date completed.

6. Storage tanks are subject to the following requirements. The control requirements specified in paragraphs A-D of this condition shall not apply (1) where the VOC has an aggregate partial pressure of less than 0.50 psia at the maximum feed temperature or 95ºF, whichever is greater, or (2) to storage tanks smaller than 25,000 gallons.

   A. An internal floating deck or "roof" or equivalent control shall be installed in all tanks. The floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof: (1) a liquid-mounted seal, (2) two continuous seals mounted one above the other, or (3) a mechanical shoe seal.

   B. For any tank equipped with a floating roof, the permit holder shall perform the visual inspections and seal gap measurements as specified in 40 CFR § 63.1063 to verify fitting and seal integrity. Records shall be maintained of the dates seals were inspected and seal gap measurements made, results of inspections and measurements made (including raw data), and actions taken to correct any deficiencies noted.

   C. The floating roof design shall incorporate sufficient flotation to conform to the requirements of API Code 650 dated November 1, 1998, except that an internal floating cover need not be designed to meet rainfall support requirements and the materials of construction may be steel or other materials.

   D. Except for labels, logos, etc., not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum. Storage tanks must be equipped with permanent submerged fill pipes.

   E. For purposes of assuring compliance with VOC emission limitations, the permit holder shall maintain an emissions record which includes calculated emissions of VOC from all storage tanks during the previous calendar month and the past consecutive 12 month period. The record shall include tank identification number, control method used, tank capacity in gallons, name of the material stored, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, and VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures.

   Emissions from tanks shall be calculated using the methods that were used to determine the MAERT limits in the permit applications submitted up to date. Sample calculations from the applications shall be attached to a copy of this permit at the plant site.

7. The permit holder shall maintain and update monthly an emissions record which includes calculated emissions of VOC from all loading operations over the previous rolling 12 month period. The record shall include the loading spot, control method used, quantity loaded in gallons, name of the liquid loaded, vapor molecular weight, liquid temperature in degrees Fahrenheit, liquid vapor pressure at the liquid temperature in psia, liquid throughput for the previous month and rolling 12 months to date. Records of VOC temperature are not required to be kept for liquids loaded from unheated tanks which receive liquids that are at or below ambient temperatures. Emissions shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Loading Operations."

8. The cooling tower water (EPN PK-38) shall be operated and monitored in accordance with the following:

A. The cooling tower water shall be monitored monthly for VOC leakage from heat exchangers in accordance with the requirements of the TCEQ Sampling Procedures Manual Appendix P (dated January 2003 or a later edition) or another air stripping method approved by the TCEQ Executive Director. Cooling water may be monitored using the procedure in 40 CFR Part 63 Subpart XX (EPA Method 8260) if the VOC on the process side of the exchanger is water soluble with a vapor pressure less than 0.1 psia.

B. Cooling tower water VOC concentrations above 0.08 ppmw indicate faulty equipment. Equipment shall be maintained so as to minimize VOC emissions into the cooling water. Faulty equipment shall be repaired at the earliest opportunity but no later than the next scheduled shutdown of the process unit in which the leak occurs.

Emissions from the cooling tower are not authorized if the VOC concentration of the water returning to the cooling tower exceeds 0.8 ppmw. The VOC concentrations above 0.8 ppmw are not subject to extensions for delay of repair under this permit condition. The results of the monitoring and maintenance efforts shall be recorded.

9. The cooling tower (EPN PK-38) shall be operated and monitored in accordance with the following:

A. Cooling towers shall each be equipped with drift eliminators having manufacturer's design assurance of 0.001% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.

B. Total dissolved solids (TDS) shall not exceed 2500 parts per million by weight (ppmw). Dissolved solids in the cooling water drift are considered to be emitted as PM, PM_{10}, and $PM_{2.5}$ as represented in the permit application calculations.

C. Cooling towers shall be analyzed for particulate emissions using one of the following methods:

(1) Cooling water shall be sampled at least once per day for total dissolved solids (TDS); or

(2) TDS monitoring may be reduced to weekly if conductivity is monitored daily and TDS is calculated using a ratio of TDS-to-conductivity (in ppmw per µmho/cm or ppmw/siemens). The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS; or

(3) TDS monitoring may be reduced to quarterly if conductivity is monitored daily and TDS is calculated using a correlation factor established for each cooling tower. The correlation factor shall be the average of nine consecutive weekly TDS-to-conductivity ratios determined using C(2) above provided the highest ratio is not more than 10% larger than the smallest ratio.

(4) The permit holder shall validate the TDS-to-conductivity correlation factor once each calendar quarter. If the ratio of concurrently sampled TDS and conductivity is more than 10% higher or lower than the established factor, the permit holder shall increase TDS monitoring to weekly until a new correlation factor can be established.

D. Cooling water sampling shall be representative of the cooling tower feed water and shall be conducted using approved methods.

(1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, or SM 2540 C [SM – 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.

(2) The analysis method for conductivity shall be either ASTM D1125-95A (field or routine laboratory testing) or ASTM D1125-95B (continuous monitor). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.

(3) Alternate sampling and analysis methods may be used to comply with D(1) and D(2) with written approval from the TCEQ Regional Director.

(4) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.

E. Emission rates for PM, PM_{10} and $PM_{2.5}$ shall be calculated using the measured TDS and the ratio or correlation of TDS to conductivity measurements, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short-term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly.

F. The actual cooling water circulation rate shall be measured at least hourly unless the design maximum circulation rate is used for calculations. Measurements shall be reduced to an hourly average and recorded for use in emission calculations.

G. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the cooling tower operated over the previous rolling 12-month period.

Fugitive Emission Monitoring

10. Piping, Valves, Flanges, Pumps, Agitators and Compressors in contact with VOC - 28VHP

Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment.

A. The requirements of paragraphs F and G shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 pound per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request to be made available upon request.

The exempted components may be identified by one or more of the following methods:

- Piping and instrumentation diagram (PID);
- A written or electronic database or electronic file;
- Color coding;
- A form of weatherproof identification; or
- Designation of exempted process unit boundaries.

B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.

C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.

D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. Difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in Paragraph A above. If an unsafe-to-monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe-to-monitor times. A difficult-to-monitor component for which quarterly monitoring is specified, may instead be monitored annually.

E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

(1) a cap, blind flange, plug, or second valve must be installed on the line or valve; or

(2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the of the 72 hours period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24-hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. If a relief valve is equipped with rupture disc, a pressure sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity.

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR Part 60, Appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

Replacements for leaking components shall be re-monitored within 15 days of being placed back into VOC service.

G. Except as may be provided for in the special conditions of this permit, all pump, compressor and agitator seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with an automatic seal failure detection and alarm system need not be monitored. These seal systems may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

H. Damaged or leaking valves or flanges found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days and a record of the attempt shall be maintained.

I. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging within 15 days of the detection of the leak. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is

equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

J. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.

K. Alternative monitoring frequency schedules of 30 TAC § 115.352 through § 115.359 and National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items F through G of this condition.

L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.

11. Piping, Valves, Connectors, Pumps, Agitators and Compressors in Benzene Service - Intensive Directed Maintenance - 28MID

Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment:

A. The requirements of paragraphs F and G shall not apply (1) where the concentration of benzene in the stream is less than 5 percent by weight or (2) where the volatile organic compounds (VOC) has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (3) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list to be made available upon request.

The exempted components may be identified by one or more of the following methods:

- Piping and instrumentation diagram (PID);
- A written or electronic database or electronic file;
- Color coding;
- A form of weatherproof identification; or
- Designation of exempted process unit boundaries.

B. Construction of new and reworked piping, valves, pump systems, agitators and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.

C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.

D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in Paragraph A above. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.

E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

(1) a cap, blind flange, plug, or second valve must be installed on the line or valve; or

(2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph.

An approved gas analyzer shall conform to requirements listed in Method 21 of 40 CFR Part 60, Appendix A. The gas analyzer shall be calibrated with methane. In addition, the response

factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained. A first attempt to repair the leak must be made within 5 days. Records of the first attempt to repair shall be maintained. Replaced components shall be re-monitored within 15 days of being placed back into VOC service.

G. All new and replacement pumps, compressors and agitators shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

All other pump and compressor seals emitting VOC shall be monitored with an approved gas analyzer at least quarterly.

H. Damaged or leaking valves, connectors, compressor seals, pump seals and agitator seals found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

I. In lieu of the monitoring frequency specified in paragraph F, valves in gas and light liquid service may be monitored on a semiannual basis if the percent of valves leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Valves in gas and light liquid service may be monitored on an annual basis if the percent of valves leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of valves leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

J. The percent of valves leaking used in paragraph I shall be determined using the following formula:

(Vl + Vs) x 100/Vt = Vp

Where:

Vl = the number of valves found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.

Vs = the number of valves for which repair has been delayed and are listed on the facility shutdown log.

Vt = the total number of valves in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe-to-monitor valves.

Vp = the percentage of leaking valves for the monitoring period.

K. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions take for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.

L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard, or an applicable National Emission Standard for Hazardous Air Pollutants and does not constitute approval of alternative standards for these regulations.

12. Connector Monitoring - 28CNTA

In addition to the weekly physical inspection required by Item E of Special Condition 10, all connectors in gas\vapor and light liquid service with a dimethyl sulfide concentration greater than 1 weight percent shall be monitored annually with an approved gas analyzer in accordance with Items F thru J of Special Condition 10. Alternative monitoring frequency schedules ("skip options") of Title 40 Code of Federal Regulations Part 63, Subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, may be used in lieu of the monitoring frequency required by this permit condition. Compliance with this condition does not assure compliance with requirements of applicable state or federal regulation and does not constitute approval of alternative standards for these regulations.

13. Piping, Valves, Pumps, and Compressors in Ammonia Service - 28AVO

Except as may be provided for in the Special Conditions of this permit, the following requirements apply to the above-referenced equipment:

A. Audio, olfactory, and visual checks for leaks within the operating area shall be made during every shift.

B. Immediately, but no later than one hour upon detection of a leak, plant personnel shall take the following actions:

(1) Isolate the leak.

(2) Commence repair or replacement of the leaking component.

(3) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.

Date and time of each inspection shall be noted in the operator's log or equivalent. Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the Texas Commission on Environmental Quality (TCEQ) upon request.

14. Safety relief valves that discharge to the atmosphere must be equipped with a rupture disc upstream. A pressure gauge shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown. The following valves are exempt from the requirements to install a rupture disc and pressure gauge as required by this special condition.

Valve No.	Valve No.	Valve No.	Valve No.	Valve No.	Valve No.	Valve No.
44	45	66	394	90	91	107
108	109	110	111	112	113	128
129	143	156	144	148	145	154
146	150	147	161	151	160	153
164	155	159	157	163	158	162
191	192	193	212	217	283	284
293	294	308	309	315	388	318
385	607	571	608	572	478	479
488	493	489	490	491	492	494
495	397	486	487	579	580	624
626	628	629	579			

Heaters

15. The Flare (EPNs PK-16 and PK-16M) pilots and assist natural gas and Ethylene Cracking Heaters shall be fired with natural gas containing no more than 0.5 grains of total sulfur per 100 dry standard cubic feet (dscf) and/or plant fuel gas (process waste gas streams) containing no more than 10 grains of total sulfur per 100 dscf. **(TBD)**

16. The natural gas and fuel gas shall be sampled every 6 months to determine total sulfur and net heating value. Test results from the fuel supplier may be used to satisfy this requirement. Records shall be kept on a 2-yr rolling basis and shall be made available to the personnel from TCEQ, EPA and any local program having jurisdiction.

17. Ethylene Cracking Heaters shall operate according to the following conditions:

    A. The Ethylene Cracking Heaters (EPNs PK-1 through PK-6, PK-9 through PK-11) shall have maximum hourly firing rate of 220 MMBtu/hr. These heaters shall achieve the following emission rates during normal operations:

    0.085 lb NO_x/MMBtu (based on HHV of fuel) on an hourly basis, and

    0.078 lb NO_x/MMBtu (based on HHV of fuel) on an annual average basis

    0.06 lb CO/MMBtu (HHV) on an hourly and annual average basis

    B. The Ethylene Cracking Heater (EPN PK-12) shall have the maximum hourly firing rate of 190 MMBtu/hr and it shall be equipped with Selective Catalytic Reduction (SCR) system to achieve the following emission rates in the exhaust of the SCR, during normal operations:

    0.011 lb NO_x/MMBtu (based on HHV of the fuel) on an hourly basis and, 0.010 lb NO_x/MMBtu (HHV) on an annual average basis,

    0.03 lb CO/MMBtu, or 50 ppmvd CO, corrected to 3% O_2, on an hourly and annual average basis,

    0.004 lb NH_3/MMBtu, or 10 ppmvd NH_3 corrected to 3% O_2, on an hourly and annual average basis.

    C. The Ethylene Cracking Heater (EPN PK-14) shall have the maximum hourly firing rate of 231 MMBtu/hr. This heater shall achieve the following emission rates during normal operations:

    0.10 lb NOx/MMBtu (based on HHV of fuel) on an hourly basis, and

    0.070 lb NO_x/MMBtu (HHV) on an annual average basis

    0.06 lb CO/MMBtu (HHV) on an hourly and annual basis

    D. For cracking heaters, during low firing mode (operating at firing rates that are no more than 66 MMBtu/hr for EPNs PK-1 through PK-6, PK-9 through PK-11, no more than 79 MMBtu/hr for EPN PK-12, and no more than 70 MMBtu/hr for EPN PK-14), the heat based (lb/MMBtu) emission limits for NO_x and CO as stated in Parts A, B and C above, do not apply. The lb/hr and ton per year (tpy) emission rate limits stated on the maximum allowable emission rates table (MAERT) shall not be exceeded for any heater under any operating conditions.

Ongoing Determination of Compliance

18. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from Cracking Heaters; BA-106 (EPN PK-9), BA-109 (EPN PK-12) and BA-99 (EPN PK-14) to demonstrate compliance with the MAERT. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

    Sampling shall be conducted in accordance with the appropriate procedures of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods. (The Cracking Heater BA-106 was tested on April 29, 1997. The Cracking Heater BA-99 was tested on November 19, 1997. (Test reports were submitted to the TCEQ Regional Office)

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

A. The appropriate TCEQ Regional Office in the region where the source is located shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

   The notice shall include:

   (1) Proposed date for pretest meeting.

   (2) Date sampling will occur.

   (3) Name of firm conducting sampling.

   (4) Type of sampling equipment to be used.

   (5) Method or procedure to be used in sampling.

   (6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.

   (7) Procedure/parameters to be used to determine worst case emissions during the sampling period.

   The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

B. Air contaminants emitted from the Cracking Heaters BA-106 (EPN PK-9) and BA-99 (EPN PK-14) to be tested for include (but are not limited to) PM, NO_x, and CO. Air contaminants emitted from the Cracking Heater BA-109 (EPN PK-12) to be tested for include (but are not limited to) PM, NO_x, CO, and ammonia. Testing for PM is only required on EPN PK-9 and PK-12.

C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities and at such other times as may be required by the Executive Director of the TCEQ. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office. Requests for additional time to perform sampling shall be submitted to the appropriate TCEQ Regional Office.

D. The plant shall operate at maximum production rates during stack emission testing. Primary operating parameters that enable determination of production rate shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting. If the plant is unable to operate at maximum rates during testing, then future production rates shall be limited to the rates established during testing. Additional stack testing shall be performed within 120 days when higher production rates are achieved. This sampling may be waived by the TCEQ Air Section Manager for the region.

E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled “Chapter 14, Contents of Sampling Reports” of the TCEQ Sampling Procedures Manual”. The reports shall be distributed as follows:

One copy to the appropriate TCEQ Regional Office

One copy to each local air pollution control program.

F. Sampling ports and platform(s) shall be incorporated into the design of the cracking heaters according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" of the TCEQ Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.

19. The permit holder shall install, calibrate, and maintain a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of NO_x, CO, and O_2 from all the Cracking Heaters. In addition, the permit holder shall install, calibrate and maintain a continuous emission monitoring system (CEMS) to measure and record the in- stack concentration of ammonia from the Ethylene Cracking Heater (EPN PK-12).

A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division for requirements to be met.

B. Section 1 below applies to sources subject to the quality-assurance requirements of 40 CFR Part 60, Appendix F; Section 2 applies to all other sources, except Section 3 applies to Tunable Diode Laser Spectrometer (TDLS) ammonia (NH_3) CEMS:

(1) The permit holder shall assure that the CEMS meets the applicable quality-assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, Section 5.2.3 and any CEMS downtime shall be reported to the appropriate TCEQ Regional Manager, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Manager.

(2) The NO_x, CO, and O_2 monitoring systems shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days. **(7/24)**

Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, Section 5.1.2, with the following exception: a relative accuracy test audit (RATA) is not required once every four quarters (i.e., four successive quarterly CGA may be conducted). An equivalent quality-assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.

All CGA exceedances of +15 percent accuracy indicate that the CEMS is out of control.

(3) The TDLS NH_3 CEMS on Ethylene Cracking Heater (EPN PK-12) must conduct a relative accuracy test audit (RATA) and a 7-day drift test before use for compliance demonstration. The CEMS shall be installed, operated, and maintained in accordance with the manufacturer's recommendations. The "Continuous Emission Monitoring System Quality Assurance Program" provided in TCEQ NSR Project No. 369864 shall be maintained and followed, with corrective action taken when a monthly or quarterly

calibration validation indicates the instrument does not meet ± 15 percent accuracy. The instrument shall be considered out of control from the time the measurement is made that indicates the instrument is out of control until a calibration validation indicates compliance with the ± 15 percent accuracy requirement. Calibration validation shall occur at least monthly using the lower single point spike check and quarterly using the 2 different spike concentrations. “Dry basis” concentrations using process knowledge (which includes fuel feed composition) will be used in place of “wet basis” concentrations since the analyzer is path-based. **(7/24)**

C. The permit holder shall install and operate a fuel flow meter to measure the gas fuel usage and an estimated composition and heating value in accordance with the representations and the DCS Ammonia Calculation workbook provided in TCEQ NSR Project No. 369864 for all heaters. The monitoring data shall be reduced to an hourly average flow rate at least once every day, using a minimum of four equally-spaced data points from each one-hour period. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer’s specifications or at least annually, whichever is more frequent, and shall be accurate to within 5 percent. In lieu of monitoring fuel flow, the permit holder may monitor stack exhaust flow using the flow monitoring specifications of 40 Code of Federal Regulations (CFR) Part 60, Appendix B, Performance Specification 6 or 40 CFR Part 75, Appendix A. **(7/24)**

D. The monitoring data shall be reduced to 15 minute average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of pounds per hour at least once every week as follows:

The measured 15 minute average concentration from the CEMS shall be multiplied by the firing rate, which is the fuel flow, in pounds per hour, times the fuel heating value in BTU per hour. 40 CFR 60, Appendix A, Method 19, Equation 19-1 will be used to determine the hourly emission rate.

E. All monitoring data and quality-assurance data shall be maintained by the source. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.

F. The appropriate regional office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.

G. Quality assured (or valid) data must be generated when the CEMS from the Cracking Heaters authorized in this permit are operating except during the performance of a daily zero and span check Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the corresponding Cracking Heater is operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgement and the methods used recorded. Options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Regional Manager.

20. As an approved alternative to ammonia CEMS for Heater PK-12, the ammonia slip may be measured using a sorbent or stain tube device specific for ammonia measurement. The frequency of sorbent or stain tube testing shall be daily for the first 60 days of operation, after which the frequency may be reduced to weekly testing if operating procedures have been developed to prevent excess amounts of ammonia from being introduced in the SCR unit and when operation of the SCR unit has been proven successful with regard to controlling ammonia slip.

21. The Light Aromatic Distillate tank (EPN PKA-8A) is authorized to store Heavy Aromatic Distillate and the Heavy Aromatic Distillate storage tank (EPN PKA-8B) is authorized to store Light Aromatic Distillate during tank maintenance activities.

Maintenance, Startup, and Shutdown

22. Planned startup and shutdown emissions due to the activities identified in Special Condition No. 23 are authorized provided the facilities and emissions are compliant with the MAERT and special conditions.

23. This permit authorizes emissions for the planned maintenance, startup, and shutdown (MSS) activities summarized in the MSS Activity Summary (Attachment B) attached to this permit.

    Routine maintenance activities, as identified in Attachment A, may be tracked through the work orders or equivalent. Emissions from activities identified in Attachment A shall be calculated using the number of work orders or equivalent that month and the emissions associated with that activity identified in the permit amendment application dated January 7, 2008 and subsequent amendments. In lieu of using the emissions identified in the permit application, dated January 7, 2008 and subsequent amendments, the permit holder may record the information identified in paragraphs A through D below.

    The performance of each planned MSS activity not identified in Attachment A and the emissions associated with it shall be recorded and include at least the following information:

    A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;

    B. the type of planned MSS activity and the reason for the planned activity;

    C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;

    D. the date and time of the MSS activity and its duration;

    E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

    All MSS emissions shall be summed monthly and the rolling 12-month emissions shall be updated on a monthly basis.

24. Process units and facilities, with the exception of those identified in Special Condition Nos. 27 relating to Floating Roof Storage Tanks, 28 relating to Fixed Roof Storage Tanks, and 30 relating to Frac or Temporary Storage Tanks shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.

    A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining of material. Equipment that only contains material that is liquid with a VOC True Vapor Pressure (TVP) less than 0.50 psia at the normal process temperature and 95°F may be opened to atmosphere and drained in accordance with Paragraph C of this special condition. The vapor pressure at 95°F may be

used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.

B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC TVP is greater than 0.50 psia at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. Control must remain in place until degassing has been completed or the system is no longer vented to atmosphere.

C. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel or controlled wastewater system, unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.

D. If the VOC TVP is greater than 0.50 psia at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.

(1) For MSS activities identified in Attachment A, the following option may be used in lieu of (2) below. The facilities being prepared for maintenance shall not be vented directly to atmosphere, until the VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.

(2) The locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [PIDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition No. 25. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. If there is not a connection (such as a sample, vent, or drain valve) available from which a representative sample may be obtained, a sample may be taken upon entry into the system after degassing has been completed. The sample shall be taken from inside the vessel so as to minimize any air or dilution from the entry point. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. Documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above.

E. Gases and vapors with VOC TVP greater than 0.50 psia may be vented directly to atmosphere if all the following criteria are met:

(1) It is not technically practicable to depressurize or degas, as applicable, into the process.

(2) There is not an available connection to a plant control system (flare).

(3) There is no more than 50 lb of air contaminant to be vented to atmosphere during shutdown or startup of a piece of equipment, as applicable.

All instances of venting directly to atmosphere per Special Condition 24E must be documented when occurring as part of any MSS activity. The emissions associated with venting without control must be included in the work order or equivalent for those MSS activities identified in Attachment A.

25. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below.

A. VOC concentration shall be measured using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions:

(1) The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate RF shall be recorded. If the RF of the VOC (or mixture of VOCs) to be monitored is greater than 2.0, the VOC concentration shall be determined as follows:

VOC Concentration = Concentration as read from the instrument*RF

In no case should a calibration gas be used such that the RF of the VOC (or mixture of VOCs) to be monitored is greater than 5.0.

(2) Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. As an alternative the VOC concentration may be monitored over a five-minute period with an instrument designed to continuously measure concentration and record the highest concentration read. The highest measured VOC concentration shall be recorded and shall not exceed the specified VOC concentration limit prior to uncontrolled venting.

B. Colorimetric gas detector tubes may be used to determine air contaminant concentrations if they are used in accordance with the following requirements.

(1) The air contaminant concentration measured as defined in (3) is less than 80 percent of the range of the tube and is at least 20 percent of the maximum range of the tube.

(2) The tube is used in accordance with the manufacturer's guidelines.

(3) At least 2 samples taken at least 5 minutes apart must satisfy the following prior to uncontrolled venting:

measured contaminant concentration (ppmv) < release concentration.

Where the release concentration is:

10,000*mole fraction of the total air contaminants present that can be detected by the tube.

The mole fraction may be estimated based on process knowledge. The release concentration and basis for its determination shall be recorded.

Records shall be maintained of the tube type, range, measured concentrations, and time the samples were taken.

C. Lower explosive limit measured with a lower explosive limit detector.

(1) The detector shall be calibrated within 30 days of use with a certified pentane gas standard at 25% of the lower explosive limit (LEL) for pentane. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.

(2) A functionality test shall be performed on each detector within 24 hours of use with a certified gas standard at 25% of the LEL for pentane. The LEL monitor shall read no lower than 90% of the calibration gas certified value. Records, including the date/time and test results, shall be maintained.

(3) A certified methane gas standard equivalent to 58% of the LEL for pentane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for pentane.

26. This condition applies only to piping and components subject to leak detection and repair monitoring requirements identified in other NSR permits. Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open-ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period:

A. a cap, blind flange, plug, or second valve must be installed on the line or valve; or

B. the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open-ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

27. This permit authorizes emissions from floating roof storage tanks (EPNs PKA-8A, and PKA-8B) during planned floating roof landings. Except for periods in which the tank vapor space is routed to a control device meeting the requirements of Special Condition No. 33, tank roofs may only be landed for changes of tank service or tank inspection/maintenance as identified in the permit application dated January 7, 2008. Tank roof landings include all operations when the tank floating roof is on its supporting legs. These emissions are subject to the maximum allowable emission rates indicated on the MAERT. The following requirements apply to tank roof landings.

Tank roofs may only be landed for changes of tank service or tank inspection/maintenance as identified in the permit application. Emissions from change of service tank landings, for which the tank is not cleaned and degassed, shall not exceed 10 tons of VOC in any rolling 12 month period. Tank roof landings include all operations when the tank floating roof is on its supporting legs. These emissions are subject to the maximum allowable emission rates indicated on the MAERT. The following requirements apply to tank roof landings.

A. The tank liquid level shall be continuously lowered after the tank floating roof initially lands on its supporting legs until the tank has been drained to the maximum extent practicable without entering the tank. Liquid level may be maintained steady for a period of up to two hours if necessary to allow for valve lineups and pump changes necessary to drain the tank. This requirement does not apply where the vapor under a floating roof is routed to control during this process.

B. If the VOC TVP of the liquid previously stored in the tank is greater than 0.50 psia at 95°F, tank refilling or degassing of the vapor space under the landed floating roof must begin within 48 hours after the tank has been drained unless the vapor under the floating roof is routed to control or a controlled recovery system during this period. The tank shall not be opened except as necessary to set up for degassing and cleaning. Floating roof tanks with liquid capacities less than 100,000 gallons may be degassed without control if the VOC TVP of the standing liquid in the tank has been reduced to less than 0.02 psia prior to ventilating the tank. Controlled degassing of the vapor space under landed roofs shall be completed as follows:

(1) Any gas or vapor removed from the vapor space under the floating roof must be routed to a control device or a controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv, or 10 percent of LEL. The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space under the floating roof when degassing to the control device or controlled recovery system.

(2) The vapor space under the floating roof shall be vented using good engineering practice to ensure air contaminants are flushed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.

(3) A volume of purge gas equivalent to twice the volume of the vapor space under the floating roof must have passed through the control device or into a controlled recovery system, before the vent stream may be sampled to verify acceptable VOC concentration. The measurement of purge gas volume shall not include any make-up air introduced into the control device or recovery system. The VOC sampling and analysis shall be performed as specified in Special Condition 25.

(4) The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged.

(5) Degassing must be performed every 24 hours unless there is no standing liquid in the tank or the VOC TVP of the remaining liquid in the tank is less than 0.15 psia.

C. The tank shall not be opened or ventilated without control, except as allowed below, until one of the criteria in Part D of this condition is satisfied.

Minimize air circulation in the tank vapor space.

(1) One man-way may be opened to allow access to the tank to remove or de-volatize the remaining liquid. Other man-ways or access points may be opened as necessary to remove or de-volatize the remaining liquid. Wind barriers shall be installed at all open man-ways and access points to minimize air flow through the tank.

(2) Access points shall be closed when not in use.

D. The tank may be opened without restriction and ventilated without control, after all standing liquid has been removed from the tank or the liquid remaining in the tank has a VOC TVP less than 0.02 psia. These criteria shall be demonstrated in any one of the following ways:

(1) A low VOC TVP liquid, that is soluble with the liquid previously stored, may be added to the tank to lower the VOC TVP of the liquid mixture remaining in the tank to less than 0.02 psia. This liquid shall be added during tank degassing if practicable. The estimated volume of the liquid remaining in the drained tank and the volume and type of liquid added shall be recorded. The liquid VOC partial pressure may be estimated based on this information and engineering calculations.

(2) If water is added or sprayed into the tank to remove standing VOC, one of the following must be demonstrated:

(a) Take a representative sample of the liquid remaining in the tank and verify no visible sheen using the static sheen test from 40 CFR 435 Subpart A, Appendix 1.

(b) Take a representative sample of the liquid remaining in the tank and verify hexane soluble VOC concentration is less than 1000 ppmw using EPA method 1664 (may also use 8260B or 5030 with 8015 from SW-846).

(c) Stop ventilation and close the tank for at least 24 hours. When the tank man-way is opened after this period, verify VOC concentration is less than 1000 ppmv through the procedure in Special Condition 25.

(3) No standing liquid verified through visual inspection.

The permit holder shall maintain records to document the method used to release the tank.

E. Tanks shall be refilled as rapidly as practicable until the roof is off its legs with the following exception:

(1) Only one tank with a landed floating roof can be filled at any time at a rate not to exceed 3500 gallons/hr.

(2) The vapor space below the tank roof is directed to a control device when the tank is refilled until the roof is floating on the liquid. The control device used and the method and locations used to connect the control device shall be recorded. All vents from the tank being filled must exit through the control device.

F. The occurrence of each roof landing and the associated emissions shall be recorded and the rolling 12-month tank roof landing emissions shall be updated on a monthly basis. These records shall include at least the following information:

(1) The identification of the tank and emission point number, and any control devices or recovery systems used to reduce emissions;

(2) The reason for the tank roof landing;

(3) For the purpose of estimating emissions, the date, time, and other information specified for each of the following events:

(a) the roof was initially landed,

(b) all liquid was pumped from the tank to the extent practical,

(c) start and completion of controlled degassing, and volumetric flow,

(d) all standing liquid was removed from the tank or any transfers of low VOC true vapor pressure liquid to or from the tank including volumes and vapor pressures to reduce tank liquid VOC true vapor pressure to <0.02 psia,

(e) if there is liquid in the tank, VOC TVP of liquid, start and completion of uncontrolled degassing, and total volumetric flow,

(f) refilling commenced, liquid filling the tank, and the volume necessary to float the roof, and

(g) tank roof off supporting legs, floating on liquid.

(4) The estimated quantity of each air contaminant, or mixture of air contaminants, emitted between events c and g with the data and methods used to determine it. The emissions associated with roof landing activities shall be calculated using the methods described in Section 7.1.3.2 of AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 - Storage of Organic Liquids" dated November 2006 and the permit application dated January 7, 2008.

28. Fixed roof storage tanks are subject to the requirements of Special Condition Nos. 27.C and 27.D. If the ventilation of the vapor space is controlled, the emission control system shall meet the requirements of Special Condition Nos. 27.B.(1) through 27.B.(4). Records shall be maintained per Special Condition Nos. 27.F.(3) c through 27.F.(3) e, and 27.F.(4).

29. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site:

A. Prior to initial use, identify any liquid in the truck. Record the liquid level and document the VOC TVP. After each liquid transfer, identify the liquid, the volume transferred, and its VOC TVP.

B. If vacuum pumps or blowers are operated when liquid is in or being transferred to the truck, the following requirements apply:

(1) If the VOC TVP of the liquid in or being transferred to the truck is greater than 0.50 psi at 95°F, the vacuum/blower exhaust shall be routed to a control device or a controlled recovery system.

(2) Equip fill line intake with a “duckbill” or equivalent attachment if the hose end cannot be submerged in the liquid being collected.

(3) A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.

(a) For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a “duckbill” or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.

(b) If the vacuum truck exhaust is controlled with a control device other than an engine or oxidizer, VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least every hour during each transfer shall be recorded, measured using an instrument meeting the requirements of Special Condition 25 A, B, or C.

C. Record the volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.

D. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of liquid transferred for each pick-up are not maintained, the emissions shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12 month vacuum truck emissions shall also be determined on a monthly basis.

E. If the VOC TVP of all the liquids vacuumed into the truck is less than 0.10 psia, this shall be recorded when the truck is unloaded or leaves the plant site and the emissions may be estimated as the maximum potential to emit for a truck in that service as documented in the permit application. The recordkeeping requirements in Special Condition 29A through 29D do not apply.

30. The following requirements apply to frac, or temporary tanks and vessels used in support of MSS activities.

A. Except for labels or logos not to exceed 15 percent of the tank/vessel total surface area, the exterior surfaces of these tanks/vessels that are exposed to the sun shall be white or aluminum effective May 1, 2013. This requirement does not apply to tanks/vessels that only vent to atmosphere when being filled, sampled, gauged, or when removing material.

B. These tanks/vessels must be covered and equipped with fill pipes that discharge within 6 inches of the tank/vessel bottom.

C. These requirements do not apply to vessels storing less than 450 gallons of liquid that are closed such that the vessel does not vent to atmosphere except when filling, sampling, gauging, or when removing material.

D. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all frac tanks during the previous calendar month and the past consecutive 12 month period. This record must be updated by the last day of the month following. The record shall include tank identification number, dates put into and removed from service, control method used, tank capacity and volume of liquid stored in gallons, name of the material stored, VOC molecular weight, and VOC TVP at the estimated monthly average material temperature in psia. Filling emissions for tanks shall be calculated using the TCEQ publication titled “Technical Guidance Package for Chemical Sources - Loading Operations” and standing emissions determined using: the TCEQ publication titled “Technical Guidance Package for Chemical Sources - Storage Tanks.”, EPA Tanks, or similar methods, as approved in the permit amendment application dated January 2008.

E. If the tank/vessel is used to store liquid with a VOC TVP less than 0.10 psia at 95°F, records may be limited to the days the tank is in service and the liquid stored. Emissions may be estimated based upon the potential to emit as identified in the MSS permit amendment application dated January 7, 2008.

31. Additional occurrences of MSS activities authorized by this permit may be authorized under permit by rule only if conducted in compliance with this permit’s procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity.

32. All permanent facilities authorized in this permit must comply with all operating requirements, limits, and representations as specified in the special conditions during planned startup and shutdown unless alternate requirements for emissions from routine emission points are identified below:

A. Combustion units, with the exception of flares, at this site are exempt from NO_x and CO operating requirements identified in special conditions in other NSR permits during planned startup and shutdown if the following criteria are satisfied.

(1) The maximum allowable emission rates in the permit authorizing the facility are not exceeded.

(1) The startup period does not exceed 8 hours in duration and the firing rate does not exceed 75 percent of the design firing rate. The time it takes to complete the shutdown does not exceed 4 hours.

(2) Control devices are started and operating properly when venting a waste gas stream.

B. A record shall be maintained indicating that the start and end times of each of the activities identified above occur and documentation that the requirements for each have been satisfied.

33. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified in this condition. Control devices shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device.

Controlled recovery systems identified in this permit shall be directed to an operating process unit or to a collection system that is vented through a control device meeting the requirements of this permit condition.

A. Carbon Adsorption System (CAS).

(1) The CAS shall consist of 2 carbon canisters in series with adequate carbon supply for the emission control operation.

(2) The CAS shall be sampled downstream of the first can and the concentration recorded at least once every hour of CAS run time to determine breakthrough of the VOC. The sampling frequency may be extended using either of the following methods:

(a) It may be extended to up to 30 percent of the minimum potential saturation time for a new can of carbon. The permit holder shall maintain records including the calculations performed to determine the minimum saturation time.

(b) The carbon sampling frequency may be extended to longer periods based on previous experience with carbon control of a MSS waste gas stream. The past experience must be with the same VOC, type of facility, and MSS activity. The basis for the sampling frequency shall be recorded. If the VOC concentration on the initial sample downstream of the first carbon canister following a new polishing canister being put in place is greater than 100 ppmv above background, it shall be assumed that breakthrough occurred while that canister functioned as the final polishing canister and a permit deviation shall be recorded.

(3) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 25.A or B.

(4) Breakthrough is defined as the highest measured VOC concentration at or exceeding 100 ppmv above background. When the condition of breakthrough of VOC from the initial saturation canister occurs, the waste gas flow shall be switched to the second canister and a fresh canister shall be placed as the new final polishing canister within four hours. Sufficient new activated carbon canisters shall be maintained at the site to replace spent carbon canisters such that replacements can be done in the above specified time frame.

(5) Records of CAS monitoring shall include the following:

(a) Sample time and date.

(b) Monitoring results (ppmv).

(c) Canister replacement log.

(6) Single canister systems are allowed if the time the carbon canister is in service is limited to no more than 30 percent of the minimum potential saturation time. The permit holder shall maintain records for these systems, including the calculations performed to determine the saturation time. The time limit on carbon canister service shall be recorded and the expiration date attached to the carbon can.

B. Thermal Oxidizer

(1) The thermal oxidizer firebox exit temperature shall be maintained at not less than 1400°F and waste gas flows shall be limited to assure a 0.5 second residence time in the firebox while waste gas is being fed into the oxidizer.

(2) The thermal oxidizer exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the oxidizer. The temperature measurements shall be made at intervals of six minutes or less and recorded at that frequency.

Temperature measurements recorded in continuous strip charts may be used to meet the requirements of this section.

The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ±0.75 percent of the temperature being measured expressed in degrees Celsius or ±2.5°C.

(3) As an alternative to Special Condition No. 33.B.(1), the thermal oxidizer may be tested within the past 12 months to confirm a minimum 99 wt% destruction efficiency. The results of the test will be used to determine the minimum operating temperature and residence time. Stack VOC concentrations and flow rates shall be measured in accordance with applicable United States Environmental Protection Agency (EPA) Reference Methods. A copy of the testing results shall be included with the emission calculations.

(4) As an alternative to Special Condition 33.B (1-2), the thermal oxidizer may be equipped with continuous VOC monitors (inlet and outlet). The VOC monitors shall be calibrated and maintained according to Special Condition No. 25A. In order to demonstrate compliance with this requirement, inlet and outlet mass flow rates and VOC concentrations shall be measured and destruction efficiency shall be calculated on an hourly basis to confirm a minimum of 99 wt. % destruction efficiency.

C. The plant flare system

The flare systems shall satisfy the requirements of Special Condition 4 and 5 of this permit during planned MSS activities authorized by this permit.

34. Planned maintenance activities must be conducted in a manner consistent with good practice for minimizing emission, including the use of air pollution control equipment, practices and processes. All reasonable and practical efforts to comply with Special Condition Nos. 21 through 33 must be used when conducting the planned maintenance activity, until the commission determines that the efforts are reasonable or impractical, or that the activity is an unplanned maintenance activity.

Impacts Related Restrictions

35. Surge tank Carbon Canister (EPN PK-75) shall be used as a backup control device for Ethylene Flare (EPN PK-16) for a maximum of 30 days/yr.

36. Carbon bed change-out activities shall be performed as follows:

A. Only one carbon bed change-out (spent carbon bed unloading/loading) shall be done at a time for fixed carbon canisters at either CARB-LD1, CARB-LD2 or CARB-LD-3. There shall be no simultaneous carbon canister change-outs at EPN CARBLOAD.

B. Each carbon bed change-out activity shall be done during daytime and is limited to one hour only.

C. All portable carbon canisters shall be taken offsite for disposal. Only fixed carbon beds shall be loaded/unloaded on site.

37. Roof landings may occur at either EPN PKA-8AM or PKA-8BM in any one hour. Simultaneous roof landings at both EPNs are not allowed.

Recordkeeping

38. The records required by these special conditions shall be maintained in hard copy or electronic format and shall be maintained for at least five years rather than the two-year period specified in General Condition No. 7. The five-year record retention requirement does not apply to records generated before January 2022. These records shall be made immediately available at the request of personnel from the TCEQ or any air pollution control agency with jurisdiction. **(TBD)**

Flare CB-801 Consent Decree and AMOC (XX/24)

39. Flare CB-801 (EPNs PK-16 and PK-16M) is subject to requirements in the Federal Consent Decree Case 2:21-cv-00114 (DJ# 90-5-2-1-11114) as the Steam-Assisted Ethylene flare at the Orange Facility. The consent decree requires submission to the TCEQ of an appropriate application to incorporate the required Flare Gas Recovery System (FGRS) and associated emission reductions by December 31, 2025. **(TBD)**

40. Alternative method of control (AMOC242) issued September 30, 2023, shall be used for compliance and supersedes compliance with requirements in 30 TAC Chapter 115 and other federal rules. If there is a conflict in compliance with Special Condition No. 4 and the AMOC, the most stringent requirement must be complied with. **(TBD)**

Date: TBD

Permit 914 and PSDTX1642

Attachment A

Routine Maintenance Activities

Pump Inspection/Cleaning/Repair/Replacement

Fugitive component (valve, pipe, flange) Inspection/Cleaning/Repair/Replacement

Date: March 22, 2019

Permit 914 and PSDTX1642

Attachment B

MSS Activity Summary

Facilities	Description	Emissions Activity	EPN
Tanks and sumps/trenches	Vacuum unloading/loading of tanks, sumps/trenches	Vent to carbon canisters or atmosphere	VAC-LOAD
Tank and vessel draining/degassing	Unit shutdown & cleaning	Vent to atmosphere	TANK-DEGAS
Quench tower, settler, and caustic units	Degassing of facilities	Vent to flare PK-16M	LOVOC-DEGAS
All process units	Process unit startup, shutdown, maintenance except during Flare (PK-16M) outage	Vent to flare PK-16M and to atmosphere	PK-16M
Floating Roof tanks	Floating Roof Landings and Maintenance	Vent to atmosphere	PKA8AM & PKA8BM
Fixed Roof Storage Tanks	Degassing for inspections and maintenance	vent to atmosphere	TANK-DEGASS
Load/unload line degas railcar area	N2 liquid line purge	vent to flare PK-16M	LINE-DEGAS
Load/unload line degas railcar area	vapor line purge	vent to atmosphere	LINE-DEGAS
Process Equipment and lines	depressuring process vessels and equipment for maintenance	vent to flare PK-16M	VESSEL-DEGAS
all process units and tanks	preparation for facility/component repair/replacement	vent to flare PK-16M	PK-16M
all process units and tanks	preparation for facility/component repair/replacement	vent to atmosphere	TANK-DEGAS & VESSEL-DEGAS
all process units and tanks	recovery from facility/component repair/replacement	vent to flare PK-16M	PK-16M
all process units and tanks	recovery from facility/component repair/replacement	vent to atmosphere	TANK-DEGAS & VESSEL-DEGAS
all process units and tanks	preparation for facility/component repair/replacement	remove liquid	TANK-DEGAS & VESSEL-DEGAS
all floating roof tanks	tank roof landing	operation with landed roof	PKA-8AM & PKA-8BM

Facilities	Description	Emissions Activity	EPN
all floating roof tanks	washing of tank with landed roof	controlled washing	PKA-8AM & PKA-8BM
all tanks	tank cleaning	cleaning activity and solvents	TANK-DEGAS
Catalyst and Molecular sieves	Catalyst and molecular sieve changeouts	Vent to atmosphere	CAT-LOAD
Carbon Beds	carbon beds changeouts	vent to atmosphere	CARB-LOAD
Tanks, process equipment and vessels	Standing and purge losses from tanks and vessels with a sludge heel	vent to atmosphere	SLUDGE-LOSS
Tanks, process equipment and vessels	Vacuum loading of sludge and washwater	vent to atmosphere	SLUDGE-LOAD
Tar box PK-62	Loading sludge from tar box into drums	vent to atmosphere	DRUM-LOAD
Piping and process lines	Fugitives from open ended lines during maintenance	vent to atmosphere	FUG-OELS
LAD storage tank	Floating roof landing losses	vent to atmosphere	PKA-8AM
HAD storage tank	Floating roof landing losses	vent to atmosphere	PKA-8BM
Flare CB-801 MSS	MSS activities	flare emissions	PK-16M
Heaters	Decoking of Heaters	Vent to atmosphere through Coke Separator Stack	PK-36
All Equipment	Clearing bottom products from equipments	Vent to Flare	PK-16M
All equipment in cold services	MeOH injection emissions from equipment in cold services	Vent to Flare	PK-16M
Ethylene fractionator feed dryer	Regenerating and purging ethylene fractionator feed dryer emissions	Vent to Flare	PK-16M
All process Units	Surge Tank emissions controlled by backup carbon canister	Vent to Carbon Canister	PK-75

Facilities	Description	Emissions Activity	EPN
All Process Units	API Separator emissions controlled by backup canister	Vent to Carbon Canister	PK-76

Date: March 22, 2019

Emission Sources - Maximum Allowable Emission Rates

Permit Number 914 and PSDTX1642

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
PK-1	Cracking Heater BA-100	VOC	1.17	4.58
		CO	13.00	47.82
		NO_x	17.20	63.78
		SO_2	0.13	0.50
		PM	1.10	4.29
		PM_{10}	1.10	4.29
		$PM_{2.5}$	1.10	4.29
PK-2	Cracking Heater BA-101	VOC	1.17	4.58
		CO	13.00	47.82
		NOx	17.20	63.78
		SO_2	0.13	0.50
		PM	1.10	4.29
		PM_{10}	1.10	4.29
		$PM_{2.5}$	1.10	4.29
PK-3	Cracking Heater BA-102	VOC	1.17	4.58
		CO	13.00	47.82
		NO_X	17.20	63.78
		SO_2	0.13	0.50
		PM	1.10	4.29
		PM_{10}	1.10	4.29
		$PM_{2.5}$	1.10	4.29

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
PK-4	Cracking Heater BA-103	VOC	1.17	4.58
		CO	13.00	47.82
		NO_X	17.20	63.78
		SO_2	0.13	0.50
		PM	1.10	4.29
		PM_{10}	1.10	4.29
		$PM_{2.5}$	1.10	4.29
PK-5	Cracking Heater BA-104	VOC	1.17	4.58
		CO	13.00	47.82
		NO_X	17.20	63.78
		SO_2	0.13	0.50
		PM	1.10	4.29
		PM_{10}	1.10	4.29
		$PM_{2.5}$	1.10	4.29
PK-6	Cracking Heater BA-105	VOC	1.17	4.58
		CO	13.00	47.82
		NO_X	17.20	63.78
		SO_2	0.13	0.50
		PM	1.10	4.29
		PM_{10}	1.10	4.29
		$PM_{2.5}$	1.10	4.29

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
PK-8	Superheater BA-111	VOC	0.32	1.42
		CO	0.06	0.26
		NO_X	4.26	18.66
		SO_2	0.04	0.15
		PM	0.45	1.96
		PM_{10}	0.45	1.96
		$PM_{2.5}$	0.45	1.96
PK-9	Cracking Heater BA-106	VOC	1.17	4.58
		CO	13.00	47.82
		NO_X	17.20	63.78
		SO_2	0.13	0.50
		PM	1.10	4.29
		PM_{10}	1.10	4.29
		$PM_{2.5}$	1.10	4.29
PK-10	Cracking Heater BA-107	VOC	1.17	4.58
		CO	13.00	47.82
		NO_X	17.20	63.78
		SO_2	0.13	0.50
		PM	1.10	4.29
		PM_{10}	1.10	4.29
		$PM_{2.5}$	1.10	4.29

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
PK-11	Cracking Heater BA-108	VOC	1.17	4.58
		CO	13.00	47.82
		NO_X	17.20	63.78
		SO_2	0.13	0.50
		PM	1.10	4.29
		PM_{10}	1.10	4.29
		$PM_{2.5}$	1.10	4.29
PK-12	Cracking Heater BA-109, 190 MMBtu/hr, maximum	VOC	0.38	1.64
		CO	5.70	24.59
		NO_x	2.09	8.23
		SO_2	0.11	0.48
		PM	0.48	2.05
		PM_{10}	0.48	2.05
		$PM_{2.5}$	0.48	2.05
		NH_3	0.76	3.28
PK-14	Cracking Heater BA-99	VOC	1.23	4.81
		CO	13.70	50.22
		NO_X	23.38	60.35
		SO_2	0.13	0.52
		PM	3.13	12.07
		PM_{10}	3.13	12.07
		$PM_{2.5}$	3.13	12.07
PK-16	Flare CB-801 (6)	VOC	1208.18	-
		CO	1889.80	-
		NO_X	391.71	-
		SO_2	20.97	-

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
PK-16M	Flare CB-801 MSS (6)	VOC	3,066.20	-
		CO	2,703.74	-
		NO_X	374.34	-
		SO_2	505.27	-
Flare CAP	Flare CB-801 Annual Cap	VOC (PSD)	-	201.98
		CO (PSD)	-	254.33
		NO_X (PSD)	-	134.78
		SO_2	-	3.46
PK-19	Regeneration Heater BA-201	VOC	0.03	0.07
		CO	0.39	1.14
		NO_X	0.47	1.36
		SO_2	0.01	0.01
		PM	0.01	0.03
		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.03
PK-23	Methanol Tank	VOC	2.24	0.10
PK-24	Analyzers	VOC	0.50	2.19
PK-30	Steam Stripper Carbon Beds	VOC	0.14	0.05
PK-33	Biocide Tank	VOC	0.26	0.01
PK-34	Dispersant Tank	VOC	0.23	0.01
PK-35	Inhibitor Tank	VOC	0.23	0.01
PK-36	Coke Separator Stack	PM	0.55	0.72
		PM_{10}	0.55	0.72
		$PM_{2.5}$	0.55	0.72
PK-37	Coagulant Tank	VOC	0.23	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
PK-38	Cooling Tower (5)	VOC	3.44	15.08
		PM	1.03	4.49
		PM_{10}	0.51	2.25
		$PM_{2.5}$	0.51	2.25
PK-39	Seal Tank	VOC	0.03	0.01
PK-41	Lube Oil Tank	VOC	0.01	0.01
PK-45	Anti-Foulant Tank	VOC	0.02	0.01
PK-49	Red Oil Inhibitor Tank	VOC	1.57	0.01
PK-53	Dispersant Tank	VOC	0.01	0.01
PK-54	Dispersant Tank	VOC	0.12	0.01
PK-61	Storm Water Carbon Canister	VOC	0.01	0.01
PK-62	Tar Removal System	VOC	0.39	0.28
PK-63	DEHA Tank	VOC	0.03	0.01
PK-64	MOPA	VOC	0.09	0.01
PK-65	Brine Tank	VOC	0.01	0.01
PK-66	Bio-Surfactant Tank	VOC	1.63	0.01
PKA-8A	LAD Tank	VOC	0.80	1.29
PKA-8B	HAD Tank	VOC	0.60	0.49
PKA-12	Railcar Loading/Unloading	VOC	0.23	1.00
PKF-F13	Fugitives (5)	VOC	23.29	102.01
PKF-F33	Fugitives (5)	VOC	2.28	9.98
		SO_2	0.13	0.50
		PM	1.10	4.29
		PM_{10}	1.10	4.29
		$PM_{2.5}$	1.10	4.29

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
PK-75	Surge Tank Carbon Canister (7)	VOC	0.71	0.07
PK-76	API Separator Carbon Canister (7)	VOC	<0.01	<0.01
PK-77	EA-1501 Cooling Water Discharge	VOC	0.16	0.70
VAC-LOAD	Vacuum Loading of Tanks	VOC	1.17	0.01
TANK-DEGAS	Degassing of Tanks and Vessels	VOC	34.76	0.04
LOVOC-DEGAS	Degassing of Quench Tower, Quench Settler, and Caustic Units	VOC	0.51	0.01
LINE-DEGAS	Degassing of Lines in Railcar Unloading Area	VOC	0.01	0.01
VESSEL-DEGAS	Degassing of Vessels, Towers, Reactors, Heat Exchangers, and Process Lines	CO	0.01	0.01
		VOC	5.14	0.05
CARB-LOAD	Carbon Bed Changeouts (8)	VOC	7.11	0.02
		PM	0.24	0.01
		PM_{10}	0.12	0.01
		$PM_{2.5}$	0.12	0.01
CAT-LOAD	Catalyst and Mole Sieve Changeouts	PM	1.99	0.09
		PM_{10}	0.86	0.05
		$PM_{2.5}$	0.86	0.05
SLUDGE-LOSS	Standing and Purge Losses from Tanks and Vessels with a Sludge Heel	VOC	2.32	0.02
SLUDGE-LOAD	Vacuum Loading of Sludge and Wastewater	VOC	0.09	0.01
		NO_X	0.10	0.01
		CO	0.89	0.01
FUG-OELS	Fugitive Emissions from Open Ended Lines During Maintenance Activities	VOC	3.04	0.03

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
PKA-8AM	Roof Landing Loss Emissions from LAD Storage Tank and Tank Cleaning (9)	CO	0.89	0.02
		NO_X	0.10	0.01
		VOC	8.54	0.10
PKA-8BM	Roof Landing Loss Emissions from HAD Storage Tank and Tank Cleaning (9)	CO	0.89	0.02
		NO_X	0.10	0.01
		VOC	2.87	0.04

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal or less than 2.5 microns in diameter
CO - carbon monoxide
NH_3 - ammonia
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Hourly rates for the modes of flare operation are not additive.
Flare CB-801MSS includes those emissions from the following MSS activities that were outlined in the June 7, 2024 (TCEQ NSR Application Project No. 374897) application: Routing forward flow to flare and taking feed out of heaters (SD1), Shutdown idle (SD1 Idle), Taking feed out of the heaters and system clearing (SD2), Refrigeration losses (SD3), Startup 1 (SU1), Flared process gas during converter swap, Heater swap, Equipment swaps/clearing, Equipment blowdowns, MEOH injection, Regeneration of ethylene fractionator feed drier and purge ethylene fractionator drier, and Regeneration /Swapping of purifiers (FA-2204 A-B).
(7) Restrictions in Special Condition No. 35 apply to Surge Tank Carbon Canister (EPN PK-75)
(8) Restrictions in Special Condition No. 36 apply to carbon bed change outs (EPN CARB-LOAD).
(9) Restrictions in Special Condition No. 37 apply to roof landings for LAD and HAD tanks (EPN PKA-8AM or PKA-8BM).

Date: TBD

Permit Amendment
Source Analysis & Technical Review

Company	**The Dow Chemical Company**	Permit Numbers	**914 and PSDTX1642**
City	**Orange**	Project Number	**374897**
County	**Orange**	Regulated Entity Number	**RN100542711**
Project Type	**Amendment**	Customer Reference Number	**CN600356976**
Project Reviewer	**Lou Malarcher, P.E.**	Received Date	**June 7, 2024**
Site Name	**Ethylene Unit**		

Project Overview

The Dow Chemical Company (Dow) submitted this application for the amendment of New Source Review (NSR) Permit No. 914 for the Ethylene Unit located at Dow's Sabine River Operations site in Orange, Orange County, Texas. This application is to modify the existing Flare CB-801 (Routine and MSS) (EPNs PK-16 and PK-16M).

The flare is currently authorized for emissions under the operating scenarios; Routine emissions (Flare CB-801); Startup, Shutdown, and Malfunction as identified in Table 8 of the permit amendment application received on December 9, 2014 (Flare CB-801 SSM); and Planned Maintenance, Startup, and Shutdown (MSS) outlined in the January 2008 MSS application (Flare CB-801 MSS). The applicant has requested that Flare CB-801 SSM be removed and the remaining individual annual emissions be combined as one long-term annual cap for the flare emissions.

Additionally, a hydrogen (offgas) stream which is currently sent to INV Nylon Chemicals Americas, LLC (INVISTA) is requested to be controlled by the flare.

Planned MSS activities associated with this unit are authorized through this permit. This project includes updates to the planned MSS activities which will result in a decrease from the current SSM and MSS combined lb/hr emission rate except for SO_2.

Emission Summary

Air Contaminant	Current Allowable Emission Rates (tpy)	Proposed Allowable Emission Rates (tpy)	Change in Allowable Emission Rates (tpy)	Project Changes at Major Sources (Baseline Actual to Allowable)*
PM	64.32	64.32	0.00	0.00
PM_{10}	62.04	62.04	0.00	0.00
$PM_{2.5}$	62.07	62.04	-0.03	0.00
VOC	314.67	384.87	70.20	70.20
NO_X	729.39	797.43	68.04	80.47
CO	655.85	760.98	105.13	105.13
SO_2	10.98	9.62	-1.36	3.46

*The site is located in Orange County which is unclassifiable or attainment for all criteria pollutants. The site is a major source for Prevention of Significant Deterioration (PSD). The applicant has indicated that this project is a major modification for PSD applicability of VOC, NO_X, and CO.

A typographical error for the $PM_{2.5}$ emission rate for Cracking Heater BA-109 (EPN PK-12) is being corrected from 2.08 tpy to 2.05 tpy. This correction will bring the $PM_{2.5}$ emissions into agreement with the PM and PM_{10} emission rate rather than being greater than the PM and PM_{10} emission rate.

Compliance History Evaluation - 30 TAC Chapter 60 Rules

A compliance history report was reviewed on:	**July 5, 2024**
Site rating & classification:	**10.90 / Satisfactory**

A compliance history report was reviewed on:	**July 5, 2024**
Company rating & classification:	**1.54 / Satisfactory**
Has the permit changed on the basis of the compliance history or rating?	**No**
Did the Regional Office have any comments? If so, explain.	**No**

Public Notice Information

Requirement	**Date**
Legislator letters mailed	6/13/2024
Date 1st notice published	6/29/2024
Publication Name: *Orange Leader*	
Pollutants: hazardous air pollutants, carbon monoxide, nitrogen oxides, organic compounds, and sulfur dioxide	
Date 1st notice Alternate Language published	6/27/2024
Publication Name (Alternate Language): *El Perico*	
1st public notice tearsheet(s) received	7/9/2024
1st public notice affidavit(s) received	7/9/2024
1st public notice certification of sign posting/application availability received	TBD
SB709 Notification mailed	7/22/2024
Date 2nd notice published	TBD
Publication Name: *Orange Leader*	
Pollutants: hazardous air pollutants, carbon monoxide, nitrogen oxides, organic compounds, and sulfur dioxide	
Date 2nd notice published (Alternate Language)	TBD
Publication Name (Alternate Language): *El Perico*	
2nd public notice tearsheet(s) received	TBD
2nd public notice affidavit(s) received	TBD
2nd public notice certification of sign posting/application availability received	TBD

Public Interest

Number of comments received	0
Number of meeting requests received	0
Number of hearing requests received	1
Date meeting held	TBD
Date response to comments filed with OCC	TBD
Date of SOAH hearing	TBD

Federal Rules Applicability

Requirement	
Subject to NSPS?	**Yes**
Subparts **A, D, NNN, & RRR**	
Subject to NESHAP?	**Yes**
Subparts **A, BB, & FF**	
Subject to NESHAP (MACT) for source categories?	**Yes**
Subparts **A & YY**	

Nonattainment review applicability:

The site is located in Orange County, which is designated as in attainment or unclassifiable for all criteria pollutants. Therefore, nonattainment review is not applicable.

PSD review applicability:

The plant is a named source and has a sitewide potential to emit (PTE) in excess of 100 tpy for CO, NO_X, PM, PM_{10}, $PM_{2.5}$, and Ozone (as VOC). Therefore, the site is a PSD major source for all criteria pollutant(s).

Contaminant	Baseline Period	Project Increase (tpy)	PSD Threshold (tpy)	PSD Review Triggered
SO_2	01/17-12/18	3.46	40	No
CO	01/21-12/22	105.13	100	Yes
Ozone as VOC	01/21-12/22	70.20	40	Yes
NO_X	01/21-12/22	80.47	40	Yes
CO2eq	2023	18,622.00	75,000	No

Actual emissions of CO and VOC during the baseline period exceeded the allowable emissions from PK-16. Using the actual emissions would allow a potential unfair benefit to the site in evaluating the project increase for Federal Applicability. Therefore, the project increase for CO and VOC are equal to the allowable increase. Actual emissions of SO_2 and NO_X during the baseline period were less than the allowable emissions from PK-16.

As the only modified source with the project is the flare which does not have an authorized emission rate for particulate matter, there is no project increase for particulate matter.

Based on this analysis, PSD review is applicable. Since PSD review is applicable, greenhouse gas (GHG) PSD review is applicable.

For the CO2eq baseline (62,004 tpy), Dow used the reported flare measurements from 2023, which is the first year with complete and validated flare data. As a second year of data was not available and the site does not have a current GHG PSD permit, this is a reasonable approach to determine the CO2eq project emission increase. Even if the baseline emissions of CO2eq were cut in half (averaged for two years with 0 additional actual emissions for the second year) the project emission increase (18,622 tpy) is less than the major modification trigger of 75,000 tpy.

Title V Applicability - 30 TAC Chapter 122 Rules

Requirement
Title V applicability:

The site is subject to the Title V program because it is a major source and operates under multiple Title V Permits with Title V Permit No. O2074 associated with the Ethylene Unit.

Requirement

Periodic Monitoring (PM) applicability:

The site is subject to the periodic monitoring requirements in 30 TAC § 122.602 and as specified in the site Title V permits. There are no periodic monitoring requirements associated with the modifications for this project**.**

Compliance Assurance Monitoring (CAM) applicability:

The site is subject to the compliance assurance monitoring (CAM) requirements in 30 TAC § 122.604 and as specified in the site Title V permits. Additionally, the following monitoring requirements are specified in NSR Permit No. 914 and associated with the modifications in this application project.

Title V Permit No. O2074 specifies that the flare (EPN PK-16) is subject to CAM. NSR Permit No. 914 requires that the flare pilots constantly have a flame present which is monitored with a thermocouple, infrared monitor, or ultraviolet monitor. The waste stream will require to be monitored with a continuous flow monitor and Btu or composition analyzer with approval of this project. A reading will be required at least every 15 minutes and the hourly average recorded. The waste gas capture system is required to have any bypass flow monitored to verify flow at least every 15 minutes or not have a bypass.

Process Description

The Ethylene Unit is an olefin production unit. Through a thermal cracking process, followed by a series of distillation, compression, and purification steps, the Ethylene production unit converts cracking feed stocks into ethylene and propylene, C4 compounds, pyrolysis gasoline, fuel oil, and off-gas (primarily hydrogen and methane.) The primary cracking feed stocks to the plant are liquefied petroleum gases (LPG) (primarily ethane, propane, and butane), natural gas liquids (NGL) (primarily ethane, propane, butane, and mixtures of each of these), petroleum naphtha, and condensate. Other cracking feed stocks include various petroleum-derived hydrocarbons in the C5-C10 carbon number range.

The flare system consists of one flare (EPNs PK-16 and PK-16M) to provide safe control of waste gases from the plant process vents. This flare is equipped with a totalizing flow measurement and compositional analyzer to speciate the hydrocarbons in the flared gases. Routine and maintenance waste gas streams from the Ethylene plant are currently routed to the flare.

The proposed emission rates result from a change in the calculation method of emission rates from the flare, where the rates were previously calculated based on assumed routine operation cases and are now calculated based on measured speciated flowrate data from the flare CEMS, with a destruction and removal efficiency (DRE) of 99% for ethylene and propylene, and 98% for all other VOCs. The DRE of 99% for ethylene and propylene is proposed to replace the previous DRE of 99.5%. This change will adhere to current TCEQ BACT guidance to utilize 99% DRE for compounds with up to three carbon atoms, and to align with calculations methods used in similar DOW facilities. Additionally, a hydrogen (offgas) stream will now be routed to the Ethylene unit flare resulting in increased CO and NO_X emissions. The scenario authorized as EPN Flare PK-16M (SSM) will be removed and only planned MSS emissions will be accounted for in EPN PK-16M (MSS).

Project Scope

The following changes are requested with this amendment application.

1. Modify the emission calculation representation of the existing flare CB-801 (EPNs PK-16 and PK-16MSS). The flare is designed to reduce VOC emissions with an efficiency of 99% DRE for ethylene and propylene, and 98% for all other VOCs. Up until the last renewal/amendment for the Ethylene Unit (TCEQ NSR Project No. 238543, March 22, 2019), the flare permit representations were based on expected flow rates from certain routine operation cases and not on actual measured flare flowrates. In this amendment, Dow will utilize measured flare speciated flowrate data to calculate expected hourly and annual average emission rates for Routine operations and planned MSS, while applying more conservative DREs than in the previous permit representation (e.g. 99% for propylene and ethylene, in place of the previously used DRE of 99.5%).
2. Utilize new monitoring data to determine NO_X and CO emissions from the flare for Flare EPNs PK-16 and PK-16M.
3. Modify the emission calculation representation of maintenance operations of the existing Flare CB-801 (EPN PK16M) where emissions previously classified as “SSM” or startup, shutdown, malfunction are now removed, and emissions

related to all maintenance activities are accounted for in the planned MSS category (EP PK-16M Flare CB-801 MSS).
4. Add an additional hydrogen (offgas) stream to the Flare, causing an increase in CO and NO_X emissions.
5. Add an annual cap for flare routine and maintenance operations.
6. Update the special conditions associated with the flare to reference 40 CFR 63.670 and 63.671 to be used in lieu of 40 CFR 60.18 as outlined in the alternative means of control (AMOC) (AMOC242) submitted to the TCEQ and EPA Region 6 in May 2024.

Special Condition (SC) Updates with Approval of this Project:

Current SC #	New SC #	Change
3A., B., & C.	3A., B., & C.	Update format to continue identifying applicable Subpart as outline level 2 and move the rules to level 3 which is closer to the currently expected format without forcing renumbering of all of the special conditions.
4	-	All of the current flare requirements will be replaced with current monitoring and recordkeeping requirements following the consent decree and 40 CFR Part 63 requirements which became applicable to the flare as of July 6, 2023. A concurrent AMOC (AMOC242) will be issued prior to the publication of the 2nd Public Notice (NAPD) package for this amendment. These flare requirements will be noted as PSD requirements.
-	4.A through E	Will require monitoring of the waste gas, purge gas, supplemental gas, and sweep gas to determine the NHV_{cz}. The requirements will also specify how the VOC, SO_2, CO, and NO_X emissions will be determined.
5.A and B(1)	5.A and B(1)	Paragraph A includes the option as B. for not having a bypass however there is an additional 5.B with recordkeeping requirements. This typographical error will be corrected. Additionally, the consent decree requirement for a flare gas recovery system which was authorized by Standard Permit could be considered a bypass, B(1) will be updated from "Install a flow indicator that records and verifies zero flow…" to "Install a flow indicator that records and verifies bypass flow…".
10.A	10.A	The methods for tracking of exempt components will be updated from a style number to a bullet list. This is a minor formatting update to eliminate having two A(1) and A(2). It is not a dated change.
11.A	11.A	The methods for tracking of exempt components will be updated from a style number to a bullet list. This is a minor formatting update to eliminate having two A(1), A(2), and A(3). It is not a dated change.
15	15	Will be updated to include that the flare (EPNs PK-16 and PK-16M) pilots and assist natural gas along with the Ethylene Cracking Heaters, as currently specified, will contain no more than 0.5 grains of total sulfur per 100 dscf. The condition previously allowed that the natural gas to the Ethylene Cracking Heaters could contain up to 5 grains of total sulfur per 100 dscf. The applicant confirmed that the lower concentration was appropriate for all sources at the site burning pipeline natural gas.
-	38	Will be added as a new condition to specify that all record keeping is at least five years rather than the two years specified in the General Conditions.
-	39	This special condition will be added to document how Flare CB-801 is referred to in the applicable consent decree and that the site will submit an application by December 31, 2025, for incorporating the actual Flare Gas Recovery System emission reductions into this permit.
-	40	This special condition will be added to document that an AMOC has been issued to utilize the 40 CFR Subpart 63 (MACT) flare requirements to supersede 30 TAC Chapter 115 which requires flares meet 40 CFR Part 60 (NSPS) §60.18 flare requirements.

MAERT Emission Updates with Approval of this Project:

- Cracking Heater BA-109, 190 MMBtu/hr maximum (EPN PK-12) will have a typographical error for the $PM_{2.5}$

emission rate corrected from 2.08 tpy to 2.05 tpy. This correction will bring the $PM_{2.5}$ emissions into agreement with the PM and PM_{10} emission rate. The typographical error was tracked to TCEQ NSR Project No. 223100 when EPN PK-12 was authorized. This is not a modification and subject to BACT or Public Notice.

- Flare CB-801 (EPN PK-16) will have the annual emissions removed as these routine annual emissions will become included in a cap.
- Flare CB-801 SSM (EPN PK-16M) will be removed from the MAERT as only planned MSS emissions will be authorized with the source name Flare CB-801 MSS (EPN PK-16M).
- Flare CB-801 MSS (EPN PK-16M) will be moved from the end of the MAERT to follow the routine emissions (EPN PK-16) as the EPNs will have a combined annual cap. The annual emissions authorized for EPN PK-16M will be removed as these planned MSS annual emissions will become included in a cap. The VOC emissions will be updated from 1,772.94 lb/hr to 3,066.20 lb/hr; the CO emissions will be updated from 1,794.16 lb/hr to 2,703.74 lb/hr; the NO_X emissions will be updated from 383.56 lb/hr to 374.34 lb/hr; and the SO_2 emissions will be updated from 49.55 lb/hr to 505.27 lb/hr.
- The source name Flare CB-801 Annual Cap (EPN Flare Cap) will be added, replacing the individual and separate flare annual emission rates. The new cap will include VOC at 201.98 tpy replacing the three individual rates that summed to 131.78 tpy; CO at 254.33 tpy replacing the three individual rates that summed to 149.20 tpy; NO_X at 134.78 tpy replacing the individual rates that summed to 66.74 tpy; and SO_2 at 3.46 tpy replacing the individual rates that summed to 4.82 tpy.
- Footnote (6) will have the “Annual allowable emission rates are additive.” Statement removed as the annual emissions will now be a cap. The footnote will also have the Flare CB-801SSM statements removed as that EPN is being removed. Flare CB-801MSS will be updated to match MSS activities represented in this application.

Best Available Control Technology

Source Name	EPN	Best Available Control Technology Description
Flare CB-801	PK-16	This is a steam assisted flare. The routine waste gas to the flare to establish the emission rates is represented as having an hourly average heat content of 433 Btu/scf and an annual average heat content of 294 Btu/scf. The waste stream is represented as always having a majority make-up being hydrogen (usually between 0.85 and 0.95 volumetric fraction). Other routine emissions scenarios to be controlled include offgas which is even higher in hydrogen and vessel depressuring and loading which would have a higher Btu/scf without the addition of hydrogen. 40 CFR Part 63 Subpart CC requires 270 Btu/scf. CB-801 MSS will have the existing MSS activities updated and the addition of routing forward flow to flare and taking feed out of heaters (SD1), shutdown idle (SD1 Idle), flared process gas during converter swap, heater swap, equipment swaps/clearing, equipment blowdowns, and removal of Initial Shutdown (SD1). The flare, as represented, will achieve 99% destruction efficiency for controlling certain VOC compounds with up to three carbons and 98% otherwise. The flare tip net heating value will be monitored and maintained above 270 Btu/scf. The flare will achieve the CO and NO_X emissions based on TCEQ flare emission factor guidelines using good combustion technique at the flare tips. The flare will achieve the SO_2 emissions based on total sulfur in the natural gas being converted to SO_2 and limiting the total sulfur content in the natural gas. The flare will operate as described during control of emissions from routine and MSS activities satisfying Tier I BACT.
Flare CB-801 MSS	PK-16M	
Flare CB-801 Annual Cap	Flare CAP	

The flare is subject to a federal consent decree, decree Case 2:21-cv-00114 (DJ# 90-5-2-1-11114) with the EPA; which requires the addition of a flare gas recovery unit (FGRS). Construction of the FGRS has been authorized through TCEQ Standard Permit 172656 and is underway. This action does not include the emission reduction from the flare required for the FGRS.

Additionally, an Alternative Method of Compliance (AMOC) has been requested from the TCEQ and approved. The purpose of the AMOC, regarding this flare, is to receive approval to comply with the process vent provisions of 40 CFR 63 Subpart YY as superseding the requirements in 30 TAC Chapter 115.

The flare MSS activities are included in Attachment B of the Special Conditions as follows:

Flared MSS Activity on MAERT	Facilities	Description	Emissions Activity	EPN
Startup 1 (SU1)	All process units	Process unit startup, shutdown, maintenance except during Flare (PK-16M) outage	Vent to flare PK-16M and to atmosphere	PK-16M
Equipment blowdowns	all process units and tanks	preparation for facility/component repair/replacement	vent to flare PK-16M	PK-16M
Flared process gas during converter swap; Heater swap; Equipment swaps/clearing; Regeneration /Swapping of purifiers (FA-2204 A-B)	all process units and tanks	recovery from facility/component repair/replacement	vent to flare PK-16M	PK-16M
Routing forward flow to flare and taking feed out of heaters (SD1); Shutdown idle (SD1 Idle); Taking feed out of the heaters and system clearing (SD2); Refrigeration losses (SD3)	Flare CB-801 MSS	MSS activities	flare emissions	PK-16M
Flared process gas during converter swap; Heater swap; Equipment swaps/clearing; Regeneration /Swapping of purifiers	All Equipment	Clearing bottom products from equipments	Vent to Flare	PK-16M

Flared MSS Activity on MAERT	Facilities	Description	Emissions Activity	EPN
MEOH injection	All equipment in cold services	MeOH injection emissions from equipment in cold services	Vent to Flare	PK-16M
Regeneration of ethylene fractionator feed drier and purge ethylene fractionator drier	Ethylene fractionator feed dryer	Regenerating and purging ethylene fractionator feed dryer emissions	Vent to Flare	PK-16M

Impacts Evaluation

Was modeling conducted? **Yes** Type of Modeling: **AERMOD (Version 23132)**

Is the site within 3,000 feet of any school? **No**

Additional site/land use information:

Dow has a single property line designation (SPLD) with SRW Cogeneration Limited Partnership (SRW) and INVISTA S.A.R.L (INVISTA) at the Sabine River Operations site. The closest residence is over 1,000 feet from the North plant property boundary.

The modeling audit completed by the Air Dispersion Modeling Team (ADMT) is available in the TCEQ Records Online (Web Content Center; WCC) and identified with content id 7289045. The modeling audit confirmed that the air quality analysis (AQA) was acceptable for all review types and pollutants.

National Ambient Air Quality Standards (NAAQS) and State Property Line (SPL) Analysis

The modeling demonstrated that for CO and NO_X the emission increase is less than the de minimis limit for the National Ambient Air Quality Standards (NAAQS) and applicable State Property Line standards. Therefore, a full PSD increment analysis was not required because the predicted impacts of all pollutants subject to PSD increment review were below the significant impact level for each pollutant.

Impacts of minor NSR air pollutant SO_2 were below the applicable NAAQS and State Property Line Standard de minimis levels.

State Health Effects Review/Modeling and Effects Review Applicability (MERA)

A health effects review following TCEQ MERA was completed for 13 pollutants emitted as VOC. All 13 pollutants dropped out of the MERA by Step 3 or less than 10% of the Effects Screening Level (ESL) evaluation. For pollutants with a long-term ESL less than 10% of the short-term ESL, Step 3 was evaluated for both short-term and long-term effects. For pollutants with a long-term ESL greater than or equal to 10% of the short-term ESL, only the short-term ESL requires evaluation following MERA guidance.

No adverse health effects are expected to occur among the general public as a result of exposure to the emissions from the facilities authorized by this permit.

Project Reviewer	Date	Team Leader	Date
Lou Malarcher, P.E.		Chirag Patel	

Preliminary Determination Summary

The Dow Chemical Company
Permit Numbers 914 and PSDTX1642

I. Applicant

The Dow Chemical Company
PO Box 1089
Orange, TX 77631-1089

II. Project Location

Ethylene Unit
3055 Farmer-to-Market Road 1006
Orange County
Orange, Texas 77630

III. Project Description

The Dow Chemical Company (Dow), which owns and operates the site named Dow Chemical Sabine River Operations (Site) in Orange, Orange County, has requested amendment of New Source Review (NSR) Permit No. 914 for the Ethylene Unit located at Dow's Sabine River Operations. This amendment is to modify the existing Flare CB-801 (Routine and Planned maintenance, startup, and shutdown) emissions authorized as Emission Point Numbers (EPNs) PK-16 and PK-16M.

The flare is currently authorized emissions under the following three operating scenarios: Routine emissions (Flare CB-801); Startup, Shutdown, and Malfunction (SSM) as identified in Table 8 of the permit amendment application received on December 9, 2014 (Flare CB-801 SSM); and Planned Maintenance, Startup, and Shutdown (MSS) outlined in the January 2008 MSS application (Flare CB-801 MSS). Dow has requested that Flare CB-801 SSM operating scenario be removed, and the remaining scenarios individual annual emissions be combined as one long-term annual cap for the flare emissions.

The flare is subject to a federal consent decree, Case 2:21-cv-00114 (DJ# 90-5-2-1-11114) with the United States Environmental Protection Agency (EPA); which requires the addition of a flare gas recovery unit (FGRU). Construction of the FGRU has been authorized through TCEQ Pollution Control Standard Permit No. 172656 and is underway. The permit application currently under review and proposed for authorization does not include the emission reduction from the flare required for the FGRU. An application to update the permit to include the FGRU is required by December 31, 2025.

Additionally, a hydrogen (offgas) stream which is currently sent to INV Nylon Chemicals Americas, LLC (CN605811850) is requested to be routed to Flare CB-801 (EPNs PK-16 and PK-16M). for control and compliance. This is also required in the federal consent decree as a hydrogen rich gas mixture is to be added to the waste stream to be controlled by the Orange Ethylene flare (Flare CB-801).

An Alternative Method of Compliance (AMOC) has been requested by Dow from the TCEQ. The Site is requesting to rely on the updated Title 40 Code of Federal Regulations (40 CFR) Part 63, Subpart YY National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards (MACT YY) flare requirements and the federal consent decree (DJ # 90-5-2-1-11114) in lieu of 40 CFR 60 Standards of Performance for New Stationary Sources (NSPS) Subpart NNN Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations (NSPS NNN) and Subpart RRR Standards of Performance for Volatile Organic Compound Emissions from SOCMI Reactor Processes (NSPS RRR). Additionally, the

company requested to have the AMOC cover applicable Title 30 Texas Administrative Code (30 TAC) Chapter 115 requirements for flares and references to 40 CFR § 60.18 be replaced with the enhanced MACT YY requirements.

Emissions from the flare will be updated with this project based on actual monitoring of the waste stream composition. As required by the MACT YY, the site was required to comply with MACT YY monitoring by July 6, 2023, and provided monitoring data available for the flare waste stream and steam assist. The flare monitoring and operation of the flare to comply with the net heating value in the combustion zone (NHVcz) required by the MACT YY will become permit special conditions with issuance of this project.

IV. Emissions

Air Contaminant	Proposed Allowable Emission Rates (tpy)
VOC	384.87
NO_x	797.43
SO_2	9.62
CO	760.98
$PM/PM_{10}/PM_{2.5}$	64.32 / 62.04 / 62.04

The Proposed Allowable Emission Rates are the total authorized through this permit and not just the flare.

The flare controls routine and planned MSS activities at the site at the same time based on current authorization. Dow was required by the consent decree to establish a baseload waste gas flow rate to represent routine emissions controlled by the flare. The baseline would exclude all waste stream flows during periods of startup, shutdown, and malfunction. Having established the baseload waste gas flow rate, anything above will be identified. If the amount over the baseload cannot be associated with MSS activities, the amount will be tracked as upset or malfunction emissions. The annual flare emissions are a total allowable from the flare including both routine and planned MSS not to include upset or malfunction emissions.

V. Federal Applicability

The following chart illustrates the annual project emissions for each pollutant and whether this pollutant triggers Prevention of Significant Deterioration (PSD) review.

Pollutant	Project Emissions (tpy)	Major Mod Trigger (tpy)	PSD Triggered Yes/No
VOC	70.20	40	Yes
NO_x	80.47	40	Yes
SO_2	3.46	40	No

Pollutant	Project Emissions (tpy)	Major Mod Trigger (tpy)	PSD Triggered Yes/No
CO	105.13	100	Yes
CO2eq	18,622.00	75,000	No

Nonattainment information is not included in the table as the site is located in Orange County which is designated as in attainment or unclassifiable for all criteria pollutants. For PSD review, the site is an existing major source.

Dow used actual emissions from 2021 through 2022 as the baseline period for VOC, NO_X, and CO. For SO_2, Dow used actual emissions from 2017 through 2018.

For VOC, the actual baseline emission rate (324.47 tpy) is greater than the authorized allowable emission rate (131.78 tpy). Therefore, the difference between the current allowable emission rate and the proposed project emission rate (201.98 tpy) for VOC represents the Project Emission Increase which is greater than the Major Modification threshold of 40 tpy.

For NO_X, the actual emissions was 54.31 tpy which is less than the authorized allowable emissions (66.74 tpy). Therefore, the difference between the actual emissions and the proposed project emission rate (134.78 tpy) for NO_X represents the Project Emission Increase which is greater than the Major Modification threshold of 40 tpy.

For CO, the actual baseline emission rate (341.73 tpy) is greater than the authorized allowable emission rate (149.20 tpy). Therefore, the difference between the current allowable emission rate and the proposed project emission rate (254.33 tpy) for CO represents the Project Emission Increase which is greater than the Major Modification threshold of 100 tpy.

For SO_2, the actual emissions was 1.33 tpy which is less than the authorized allowable emissions (4.69 tpy). Therefore, the difference between the actual emissions and the proposed project emission rate (3.46 tpy, the SO_2 cap for the flare emissions with a baseline of 0) for SO_2 represents the Project Emission Increase which is less than the Major Modification threshold of 40 tpy.

As PSD review was triggered, Dow was required to evaluate the project increase for CO2eq to determine if greenhouse gas (GHG) PSD would also be triggered. For the CO2eq baseline (62,004 tpy), Dow used the reported flare measurements from 2023, which is the first year with complete and validated flare data. As a second year of data was not available and the site does not have a current GHG PSD permit, this is a reasonable approach to determine the CO2eq project emission increase. Even if the baseline emissions of CO2eq were cut in half (averaged for two years with 0 additional actual emissions for the second year) the project emission increase (18,622 tpy) would be less than the major modification trigger of 75,000 tpy.

The netting analysis was not performed, and instead, it is assumed that PSD review applies to VOC, NO_X, and CO since they exceed the major modification threshold according to 40 CFR § 52.21(b)(2)(i). All other evaluated PSD pollutants are below the major modification thresholds.

Pollutant	Project Increase (tpy) [1]	PSD Netting Trigger (tpy)	Netting Required Yes/No	Net Emission Change (tpy) [2]	Major Mod Trigger (tpy)	PSD Triggered Y/N
VOC [3]	70.20	40	Yes	N/A	40	Y
NOx [3, 4]	80.47	40	Yes	N/A	40	Y
SO_2 [4]	3.46	40	No	N/A	40	N
CO	105.13	100	Yes	N/A	100	Y
CO2eq	18,622.00	75,000	No	N/A	75,000	N

Note: The classification of the area in which the project is proposed is attainment or unclassifiable for all criteria pollutants at this time.

1 Project Increases: Comparison of Baseline Actual to PTE (or Projected Actual) Increases only.

2 Net Emissions: Baseline Actual to PTE (or Projected Actual) for the project currently under review, Baseline Actual to PTE for all other increases and decreases within netting window.

3 Ozone precursor. Either pollutant precursor can trigger BACT/LAER and impacts analysis, as applicable.

4 $PM_{2.5}$ precursor. Not used to trigger $PM_{2.5}$ BACT/LAER or impacts analysis at this time.

VI. Best Available Control Technology Review

BACT was addressed for each EPN that was either new or affected by the project. A summary of the new or affected facilities is below.

Flare:
NO_X emissions will be based on the waste gas British thermal units (Btu) content going to the flare on a rolling 60-minute basis. For Btu greater than or equal to 1,000 Btu, an emission factor of 0.0485 pound per million Btu (lb/MMBtu) will be used. If the Btu is less than 1,000 Btu, an emission factor of 0.0680 lb/MMBtu will be used.

CO emissions will be based on the waste gas Btu content going to the flare on a rolling 60-minute basis. For Btu greater than or equal to 1,000 Btu, an emission factor of 0.3503 lb/MMBtu will be used. If the Btu is less than 1,000 Btu, an emission factor of 0.3465 lb/MMBtu will be used.

VOC emissions will be based on the VOC composition of the waste stream measured going to the flare. A destruction efficiency of 99% will be used for compounds containing no more than 3 carbons that contain no elements other than carbon and hydrogen in addition to methanol, ethanol, propanol, ethylene oxide, and propylene oxide. A destruction efficiency of 98% will be used for all other VOCs.

Monitoring of the flare will include flare gas actual exit velocity, vent gas net heating value, and flared gas combustion zone net heating value on a 15-minute block average and recorded at least once every 15 minutes.

Actual monitoring data provided shows that during control of routine emissions only, the net heating value in the combustion zone (NHVcz) adjusted for hydrogen in the waste gas averaged

676 Btu/ standard cubic foot (scf) on a 15-minute block average. During times when MSS emissions were included with the routine emissions to be controlled, the NHVcz adjusted for hydrogen averaged 586 Btu/scf. These values are well above the Btu/scf found during the flare studies to be the minimum expected to achieve a high DRE. Based on historical flare studies to confirm reasonably expected destruction efficiency for VOC, the proposed destruction efficiency is reasonable.

VII. Air Quality Analysis

The air quality analysis (AQA) is acceptable for all review types and pollutants. The results are summarized below.

A. De Minimis Analysis

A De Minimis analysis was initially conducted to determine if a full impacts analysis would be required. The De Minimis analysis modeling results for 1-hr and annual NO_2 and 1-hr and 8-hr CO indicate that the project is below the respective de minimis concentrations and no further analysis is required.

The justification for selecting EPA's interim 1-hr NO_2 De Minimis level is based on the assumptions underlying EPA's development of the 1-hr NO_2 De Minimis level. As explained in EPA guidance memoranda[1], EPA believes it is reasonable as an interim approach to use a De Minimis level that represents 4% of the 1-hr NO_2 National Ambient Air Quality Standards (NAAQS).

Table 1. Modeling Results for PSD De Minimis Analysis in Micrograms Per Cubic Meter (µg/m^3)

Pollutant	Averaging Time	GLCmax[2] (µg/m^3)	De Minimis (µg/m^3)
NO_2	1-hr	3.22	7.5
NO_2	Annual	0.002	1
CO	1-hr	27	2000
CO	8-hr	10	500

The GLCmax represent the maximum predicted concentrations over five years of meteorological data.

Since the project does not have a net emission increase of 100 tons per year (tpy) or more of volatile organic compounds or nitrogen oxides, an ambient ozone impacts analysis is not required.

[1] www.tceq.texas.gov/assets/public/permitting/air/memos/guidance_1hr_no2naaqs.pdf
[2] Ground level maximum concentration

B. Air Quality Monitoring

The De Minimis analysis modeling results indicate that annual NO_2 and 8-hr CO are below their respective monitoring significance level.

Table 2. Modeling Results for PSD Monitoring Significance Levels

Pollutant	Averaging Time	GLCmax ($\mu g/m^3$)	Significance ($\mu g/m^3$)
NO_2	Annual	0.002	14
CO	8-hr	10	575

The GLCmax represent the maximum predicted concentrations over five years of meteorological data.

C. National Ambient Air Quality Standards (NAAQS) Analysis

The De Minimis analysis modeling results indicate that all pollutants and averaging times are below the respective de minimis concentration and no further analysis is required.

D. Increment Analysis

The De Minimis analysis modeling results indicate that all pollutants and averaging times are below the respective de minimis concentration and no further analysis is required.

E. Additional Impacts Analysis

The applicant performed an Additional Impacts Analysis as part of the PSD AQA. The applicant conducted a growth analysis and determined that population will not significantly increase as a result of the proposed project. The applicant conducted a soils and vegetation analysis and determined that all evaluated criteria pollutant concentrations are below their respective secondary NAAQS. The applicant meets the Class II visibility analysis requirement by complying with the opacity requirements of 30 Texas Administrative Code Chapter 111. The Additional Impacts Analyses are reasonable and possible adverse impacts from this project are not expected.

ADMT evaluated predicted concentrations from the proposed project to determine if emissions could adversely affect a Class I area. The nearest Class I area, Big Bend National Park, is located approximately 930 kilometers (km) from the proposed site.

The predicted concentrations of NO_2 and SO_2 for all averaging times, are all less than de minimis levels at a distance of 0.6 km from the proposed source in the direction the Big Bend National Park Class I area. The Big Bend National Park Class I area is an additional 929.4 km from the location where the predicted concentrations of NO_2 and SO_2 for all averaging times are less than de minimis. Therefore, emissions from the proposed project are not expected to adversely affect the Big Bend National Park Class I area.

F. Minor Source NSR and Air Toxics Review

Table 3. Project-Related Modeling Results for State Property Line

Pollutant	Averaging Time	GLCmax (µg/m^3)	De Minimis (µg/m^3)
SO_2	1-hr	4.66	16.34

Table 4. Modeling Results for Minor NSR De Minimis

Pollutant	Averaging Time	GLCmax (µg/m^3)	De Minimis (µg/m^3)
SO_2	1-hr	4.66	7.8
SO_2	3-hr	4.66	25

The GLCmax are the maximum predicted concentrations associated with one year of meteorological data.

The justification for selecting EPA's interim 1-hr SO_2 De Minimis level was based on the assumptions underlying EPA's development of the 1-hr SO_2 De Minimis level. As explained in EPA guidance memoranda[3], EPA believes it is reasonable as an interim approach to use a De Minimis level that represents 4% of the 1-hr SO_2 NAAQS.

Table 5. Generic Modeling Results for PSD

Source ID	1-hr GLCmax (µg/m^3 per lb/hr)	8-hr GLCmax (µg/m^3 per lb/hr)	Annual GLCmax (µg/m^3 per lb/hr)
PK16	0.02	0.006	0.0001
PK16M	0.02	0.006	0.0001

[3] www.epa.gov/sites/production/files/2015-07/documents/appwso2.pdf

Table 6. Generic Modeling Results for Minor NSR

Source ID	1-hr GLCmax ($\mu g/m^3$ per lb/hr)	3-hr GLCmax ($\mu g/m^3$ per lb/hr)	Annual GLCmax ($\mu g/m^3$ per lb/hr)
PK16	0.02	0.02	0.0001
PK16M	0.01	0.01	0.0001

The applicant derived the 3-hr maximum predicted concentration by multiplying the 1-hr maximum predicted concentrations by 1.

Table 7. Minor NSR Project (Increases Only) Modeling Results for Health Effects

Pollutant & CAS#[4]	Averaging Time	GLCmax ($\mu g/m^3$)	10% ESL[5] ($\mu g/m^3$)
benzene 71-43-2	1-hr	1.57	17
benzene 71-43-2	Annual	4.32E-06	0.45
1,3-butadiene 106-99-0	1-hr	0.44	51
1,3-butadiene 106-99-0	Annual	1.50E-05	0.99
n-butane 106-97-8	1-hr	0.08	6600
2-butene 107-01-7	1-hr	0.71	1000
2-butene 107-01-7	Annual	3.06E-05	48
diisobutylene 25167-70-8	1-hr	0.01	340
dimethyl sulfide 75-18-3	1-hr	0.73	0.76
ethylene 74-85-1	1-hr	14.85	140
ethylene 74-85-1	Annual	0.001	3.4
ethylbenzene 100-41-4	1-hr	0.07	2600
ethylbenzene 100-41-4	Annual	4.35E-07	57

[4] Chemical Abstract Service Number
[5] Effects Screening Level

Pollutant & CAS#[4]	Averaging Time	GLCmax (µg/m^3)	10% ESL[5] (µg/m^3)
isobutane 75-28-5	1-hr	0.35	2300
toluene 108-88-3	1-hr	1.09	450
vinyl acetate 108-05-4	1-hr	0.01	42
xylene 1330-20-7	1-hr	0.21	220
xylene 1330-20-7	Annual	1.27E-06	18

VIII. Conclusion

As described above, the applicant has demonstrated that the project meets all applicable rules, regulations, and requirements of the Texas and Federal Clean Air Acts. The Executive Director's preliminary determination is that the permits should be issued.

TCEQ Interoffice Memorandum

To: Lou Malarcher, P.E.
Chemical Section

Thru: Chad Dumas, Team Leader
Air Dispersion Modeling Team (ADMT)

From: Justin Cherry, P.E.
ADMT

Date: September 24, 2024

Subject: Air Quality Analysis Audit – The Dow Chemical Company (RN100542711)

1. Project Identification Information

Permit Application Number: 914
New Source Review (NSR) Project Number: 374897
ADMT Project Number: 9387
County: Orange

Air Quality Analysis: Submitted by AECOM, August 2024, on behalf of The Dow Chemical Company. Additional information was provided September 2024.

2. Report Summary

The air quality analysis (AQA) is acceptable for all review types and pollutants. The results are summarized below.

A. De Minimis Analysis

A De Minimis analysis was initially conducted to determine if a full impacts analysis would be required. The De Minimis analysis modeling results for 1-hr and annual NO_2 and 1-hr and 8-hr CO indicate that the project is below the respective de minimis concentrations and no further analysis is required.

The justification for selecting EPA's interim 1-hr NO_2 De Minimis level is based on the assumptions underlying EPA's development of the 1-hr NO_2 De Minimis level. As explained in EPA guidance memoranda[1], EPA believes it is reasonable as an interim approach to use a De Minimis level that represents 4% of the 1-hr NO_2 National Ambient Air Quality Standards (NAAQS).

Table 1. Modeling Results for PSD De Minimis Analysis in Micrograms Per Cubic Meter (µg/m³)

Pollutant	Averaging Time	GLCmax[2] (µg/m³)	De Minimis (µg/m³)
NO_2	1-hr	3.22	7.5

[1] www.tceq.texas.gov/assets/public/permitting/air/memos/guidance_1hr_no2naaqs.pdf
[2] Ground level maximum concentration

Pollutant	Averaging Time	GLCmax[2] (µg/m^3)	De Minimis (µg/m^3)
NO_2	Annual	0.002	1
CO	1-hr	27	2000
CO	8-hr	10	500

The GLCmax represent the maximum predicted concentrations over five years of meteorological data.

Since the project does not have a net emission increase of 100 tons per year (tpy) or more of volatile organic compounds or nitrogen oxides, an ambient ozone impacts analysis is not required.

B. Air Quality Monitoring

The De Minimis analysis modeling results indicate that annual NO_2 and 8-hr CO are below their respective monitoring significance level.

Table 2. Modeling Results for PSD Monitoring Significance Levels

Pollutant	Averaging Time	GLCmax (µg/m^3)	Significance (µg/m^3)
NO_2	Annual	0.002	14
CO	8-hr	10	575

The GLCmax represent the maximum predicted concentrations over five years of meteorological data.

C. National Ambient Air Quality Standard (NAAQS) Analysis

The De Minimis analysis modeling results indicate that all pollutants and averaging times are below the respective de minimis concentration and no further analysis is required.

D. Increment Analysis

The De Minimis analysis modeling results indicate that all pollutants and averaging times are below the respective de minimis concentration and no further analysis is required.

E. Additional Impacts Analysis

The applicant performed an Additional Impacts Analysis as part of the PSD AQA. The applicant conducted a growth analysis and determined that population will not significantly increase as a result of the proposed project. The applicant conducted a soils and vegetation analysis and determined that all evaluated criteria pollutant

concentrations are below their respective secondary NAAQS. The applicant meets the Class II visibility analysis requirement by complying with the opacity requirements of 30 Texas Administrative Code Chapter 111. The Additional Impacts Analyses are reasonable and possible adverse impacts from this project are not expected.

ADMT evaluated predicted concentrations from the proposed project to determine if emissions could adversely affect a Class I area. The nearest Class I area, Big Bend National Park, is located approximately 930 kilometers (km) from the proposed site.

The predicted concentrations of NO_2 and SO_2 for all averaging times, are all less than de minimis levels at a distance of 0.6 km from the proposed source in the direction the Big Bend National Park Class I area. The Big Bend National Park Class I area is an additional 929.4 km from the location where the predicted concentrations of NO_2 and SO_2 for all averaging times are less than de minimis. Therefore, emissions from the proposed project are not expected to adversely affect the Big Bend National Park Class I area.

F. Minor Source NSR and Air Toxics Analysis

Table 3. Project-Related Modeling Results for State Property Line

Pollutant	Averaging Time	GLCmax (µg/m^3)	De Minimis (µg/m^3)
SO_2	1-hr	4.66	16.34

Table 4. Modeling Results for Minor NSR De Minimis

Pollutant	Averaging Time	GLCmax (µg/m^3)	De Minimis (µg/m^3)
SO_2	1-hr	4.66	7.8
SO_2	3-hr	4.66	25

The GLCmax are the maximum predicted concentrations associated with one year of meteorological data.

The justification for selecting EPA's interim 1-hr SO_2 De Minimis level was based on the assumptions underlying EPA's development of the 1-hr SO_2 De Minimis level. As explained in EPA guidance memoranda[3], EPA believes it is reasonable as an interim approach to use a De Minimis level that represents 4% of the 1-hr SO_2 NAAQS.

[3] www.epa.gov/sites/production/files/2015-07/documents/appwso2.pdf

Table 5. Generic Modeling Results for PSD

Source ID	1-hr GLCmax ($\mu g/m^3$ per lb/hr)	8-hr GLCmax ($\mu g/m^3$ per lb/hr)	Annual GLCmax ($\mu g/m^3$ per lb/hr)
PK16	0.02	0.006	0.0001
PK16M	0.02	0.006	0.0001

Table 6. Generic Modeling Results for Minor NSR

Source ID	1-hr GLCmax ($\mu g/m^3$ per lb/hr)	3-hr GLCmax ($\mu g/m^3$ per lb/hr)	Annual GLCmax ($\mu g/m^3$ per lb/hr)
PK16	0.02	0.02	0.0001
PK16M	0.01	0.01	0.0001

The applicant derived the 3-hr maximum predicted concentration by multiplying the 1-hr maximum predicted concentrations by 1.

Table 7. Minor NSR Project (Increases Only) Modeling Results for Health Effects

Pollutant & CAS#[4]	Averaging Time	GLCmax ($\mu g/m^3$)	10% ESL[5] ($\mu g/m^3$)
benzene 71-43-2	1-hr	1.57	17
benzene 71-43-2	Annual	4.32E-06	0.45
1,3-butadiene 106-99-0	1-hr	0.44	51
1,3-butadiene 106-99-0	Annual	1.50E-05	0.99
n-butane 106-97-8	1-hr	0.08	6600
2-butene 107-01-7	1-hr	0.71	1000
2-butene 107-01-7	Annual	3.06E-05	48
diisobutylene 25167-70-8	1-hr	0.01	340
dimethyl sulfide 75-18-3	1-hr	0.73	0.76

[4] Chemical Abstract Service Number
[5] Effects Screening Level

Pollutant & CAS#[4]	Averaging Time	GLCmax (µg/m^3)	10% ESL[5] (µg/m^3)
ethylene 74-85-1	1-hr	14.85	140
ethylene 74-85-1	Annual	0.001	3.4
ethylbenzene 100-41-4	1-hr	0.07	2600
ethylbenzene 100-41-4	Annual	4.35E-07	57
isobutane 75-28-5	1-hr	0.35	2300
toluene 108-88-3	1-hr	1.09	450
vinyl acetate 108-05-4	1-hr	0.01	42
xylene 1330-20-7	1-hr	0.21	220
xylene 1330-20-7	Annual	1.27E-06	18

3. Model Used and Modeling Techniques

AERMOD (Version 23132) was used in a refined screening mode.

A unitized emission rate of 1 lb/hr was used to predict a generic short-term and long-term impact for each source. The generic impact was multiplied by the proposed pollutant specific emission rates to calculate a maximum predicted concentration for each source. The maximum predicted concentration for each source was summed to get a total predicted concentration for each pollutant. As noted above, the applicant derived the 3-hr maximum predicted concentration by multiplying the 1-hr maximum predicted concentration by 1. Please note for the PSD analysis, the generic modeling was based on five years of meteorological data, and the minor NSR analyses were based on one year of meteorological data. For the health effects analysis, the total predicted concentrations were compared to 10 percent of their respective ESLs (Step 3 of the Modeling and Effects Review Applicability (MERA) guidance). All pollutants met criteria of Step 3 of the MERA guidance document.

A. Land Use

Low roughness and elevated terrain were used in the modeling analysis. These selections are generally consistent with the AERSURFACE analysis, topographic map, digital elevation models, and aerial photography. The selection of low roughness is reasonable.

The AERSURFACE analysis was run with the setting at an airport, which is not appropriate. ADMT conducted test modeling and determined that the overall conclusions would not change.

B. Meteorological Data

Surface Station and ID: Port Arthur, TX (Station #: 12917)
Upper Air Station and ID: Lake Charles, LA (Station #: 3937)
Meteorological Dataset: 2017-2021 for PSD analysis; 2020 for minor NSR analysis
Profile Base Elevation: 4.9 meters

C. Receptor Grid

The grid modeled was sufficient in density and spatial coverage to capture representative maximum ground-level concentrations.

A single property line designation (SPLD) exists between The Dow Chemical Company, Inv Nylon Chemicals Americas, LLC (RN104392626), and Heritage Thermal of Texas, LLC (RN111009247). The single property line boundary was used in the minor NSR analyses for the property line receptors. Receptors were placed over the regulated entities within the SPLD for the PSD analysis.

D. Building Wake Effects (Downwash)

Input data to Building Profile Input Program Prime (Version 04274) are consistent with the aerial photography, plot plan, and modeling report.

4. Modeling Emissions Inventory

The modeled emission point source parameters and rates were consistent with the modeling report. The source characterizations used to represent the sources were appropriate.

The computation of the effective stack diameters for the flares is consistent with TCEQ modeling guidance.

A NO_X to NO_2 conversion factor of 0.9, based on Ambient Ratio Method - 2, was applied to the modeled annual and 1-hr NO_X concentrations. This is reasonable.

Maximum allowable hourly emission rates were used for the short-term averaging time analyses, and annual average emission rates were used for the annual averaging time analyses.

The TCEQ is committed to accessibility.
To request a more accessible version of this report, please contact the TCEQ Help Desk at (512) 239-4357.

Compliance History Report

Compliance History Report for CN600356976, RN100542711, Rating Year 2024 which includes Compliance History (CH) components from September 1, 2019, through August 31, 2024.

Customer, Respondent, or Owner/Operator:	CN600356976, The Dow Chemical Company	**Classification:** SATISFACTORY	**Rating:** 1.64
Regulated Entity:	RN100542711, DOW CHEMICAL SABINE RIVER OPERATIONS	**Classification:** SATISFACTORY	**Rating:** 7.08
Complexity Points:	36	**Repeat Violator:** NO	
CH Group:	05 - Chemical Manufacturing		
Location:	3055 FM 1006 ORANGE, TX 77630-8045, ORANGE COUNTY		
TCEQ Region:	REGION 10 - BEAUMONT		

ID Number(s):

AIR OPERATING PERMITS ACCOUNT NUMBER OC0007J
AIR OPERATING PERMITS PERMIT 1895
AIR OPERATING PERMITS PERMIT 1899
AIR OPERATING PERMITS PERMIT 1900
AIR OPERATING PERMITS PERMIT 1901
AIR OPERATING PERMITS PERMIT 2001
AIR OPERATING PERMITS PERMIT 2055
AIR OPERATING PERMITS PERMIT 2074
AIR OPERATING PERMITS PERMIT 2331
AIR OPERATING PERMITS PERMIT 1882
PUBLIC WATER SYSTEM/SUPPLY REGISTRATION 1810114
AIR NEW SOURCE PERMITS REGISTRATION 72030
AIR NEW SOURCE PERMITS PERMIT 40496
AIR NEW SOURCE PERMITS PERMIT 9629
AIR NEW SOURCE PERMITS PERMIT 914
AIR NEW SOURCE PERMITS REGISTRATION 914A
AIR NEW SOURCE PERMITS REGISTRATION 1423
AIR NEW SOURCE PERMITS REGISTRATION 1423A
AIR NEW SOURCE PERMITS REGISTRATION 1423B
AIR NEW SOURCE PERMITS REGISTRATION 1423C
AIR NEW SOURCE PERMITS REGISTRATION 2004
AIR NEW SOURCE PERMITS REGISTRATION 2116
AIR NEW SOURCE PERMITS REGISTRATION 2490
AIR NEW SOURCE PERMITS REGISTRATION 5745
AIR NEW SOURCE PERMITS REGISTRATION 7021
AIR NEW SOURCE PERMITS PERMIT 9176
AIR NEW SOURCE PERMITS REGISTRATION 10447
AIR NEW SOURCE PERMITS REGISTRATION 11434
AIR NEW SOURCE PERMITS REGISTRATION 12967
AIR NEW SOURCE PERMITS REGISTRATION 16327
AIR NEW SOURCE PERMITS PERMIT 17157
AIR NEW SOURCE PERMITS PERMIT 20204
AIR NEW SOURCE PERMITS PERMIT 21236
AIR NEW SOURCE PERMITS REGISTRATION 22977
AIR NEW SOURCE PERMITS REGISTRATION 23646
AIR NEW SOURCE PERMITS REGISTRATION 26158
AIR NEW SOURCE PERMITS REGISTRATION 26325
AIR NEW SOURCE PERMITS REGISTRATION 26410
AIR NEW SOURCE PERMITS REGISTRATION 28148
AIR NEW SOURCE PERMITS REGISTRATION 32733
AIR NEW SOURCE PERMITS REGISTRATION 36046
AIR NEW SOURCE PERMITS REGISTRATION 37488
AIR NEW SOURCE PERMITS REGISTRATION 41263
AIR NEW SOURCE PERMITS REGISTRATION 42054
AIR NEW SOURCE PERMITS REGISTRATION 44528
AIR NEW SOURCE PERMITS REGISTRATION 46790
AIR NEW SOURCE PERMITS REGISTRATION 47671
AIR NEW SOURCE PERMITS ACCOUNT NUMBER OC0007J
AIR NEW SOURCE PERMITS EPA PERMIT PSDTX929
AIR NEW SOURCE PERMITS REGISTRATION 75999
AIR NEW SOURCE PERMITS REGISTRATION 170810
AIR NEW SOURCE PERMITS PERMIT 49076
AIR NEW SOURCE PERMITS AFS NUM 4836100002
AIR NEW SOURCE PERMITS REGISTRATION 70647
AIR NEW SOURCE PERMITS REGISTRATION 70650
AIR NEW SOURCE PERMITS REGISTRATION 71054
AIR NEW SOURCE PERMITS REGISTRATION 71338
AIR NEW SOURCE PERMITS REGISTRATION 56781
AIR NEW SOURCE PERMITS REGISTRATION 53324
AIR NEW SOURCE PERMITS REGISTRATION 71829
AIR NEW SOURCE PERMITS REGISTRATION 72443
AIR NEW SOURCE PERMITS REGISTRATION 53572
AIR NEW SOURCE PERMITS REGISTRATION 56055
AIR NEW SOURCE PERMITS REGISTRATION 73921
AIR NEW SOURCE PERMITS REGISTRATION 73779
AIR NEW SOURCE PERMITS REGISTRATION 76955
AIR NEW SOURCE PERMITS REGISTRATION 82031
AIR NEW SOURCE PERMITS REGISTRATION 91404
AIR NEW SOURCE PERMITS REGISTRATION 101137
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AIR NEW SOURCE PERMITS REGISTRATION 104054
AIR NEW SOURCE PERMITS REGISTRATION 104059
AIR NEW SOURCE PERMITS REGISTRATION 104086

AIR NEW SOURCE PERMITS REGISTRATION 104091
AIR NEW SOURCE PERMITS REGISTRATION 104052
AIR NEW SOURCE PERMITS REGISTRATION 104090
AIR NEW SOURCE PERMITS REGISTRATION 132093
AIR NEW SOURCE PERMITS REGISTRATION 132769
AIR NEW SOURCE PERMITS REGISTRATION 133043
AIR NEW SOURCE PERMITS REGISTRATION 51941
AIR NEW SOURCE PERMITS REGISTRATION 136327
AIR NEW SOURCE PERMITS REGISTRATION 133737
AIR NEW SOURCE PERMITS REGISTRATION 136803
AIR NEW SOURCE PERMITS REGISTRATION 111631
AIR NEW SOURCE PERMITS REGISTRATION 162942
AIR NEW SOURCE PERMITS REGISTRATION 165390
AIR NEW SOURCE PERMITS REGISTRATION 163827
AIR NEW SOURCE PERMITS REGISTRATION 144517
AIR NEW SOURCE PERMITS REGISTRATION 146064
AIR NEW SOURCE PERMITS REGISTRATION 145657
AIR NEW SOURCE PERMITS REGISTRATION 149267
AIR NEW SOURCE PERMITS REGISTRATION 147752
AIR NEW SOURCE PERMITS REGISTRATION 144453
AIR NEW SOURCE PERMITS REGISTRATION 149728
AIR NEW SOURCE PERMITS REGISTRATION 150109
AIR NEW SOURCE PERMITS REGISTRATION 160038
AIR NEW SOURCE PERMITS REGISTRATION 172656
AIR NEW SOURCE PERMITS REGISTRATION 173772
AIR NEW SOURCE PERMITS EPA PERMIT PSDTX1642
AIR NEW SOURCE PERMITS REGISTRATION 176400
AIR NEW SOURCE PERMITS PERMIT 176181
IHW CORRECTIVE ACTION SOLID WASTE REGISTRATION # (SWR) 30019
WASTEWATER PERMIT WQ0000475000
AIR EMISSIONS INVENTORY ACCOUNT NUMBER OC0007J
INDUSTRIAL AND HAZARDOUS WASTE EPA ID TXD008079642
INDUSTRIAL AND HAZARDOUS WASTE PERMIT 50230
AIR NEW SOURCE PERMITS REGISTRATION 104048
AIR NEW SOURCE PERMITS REGISTRATION 104050
AIR NEW SOURCE PERMITS REGISTRATION 104057
AIR NEW SOURCE PERMITS REGISTRATION 139683
AIR NEW SOURCE PERMITS REGISTRATION 141153
AIR NEW SOURCE PERMITS REGISTRATION 114657
AIR NEW SOURCE PERMITS REGISTRATION 137218
AIR NEW SOURCE PERMITS REGISTRATION 134473
AIR NEW SOURCE PERMITS REGISTRATION 136608
AIR NEW SOURCE PERMITS REGISTRATION 133042
AIR NEW SOURCE PERMITS REGISTRATION 154818
AIR NEW SOURCE PERMITS REGISTRATION 166181
AIR NEW SOURCE PERMITS REGISTRATION 168189
AIR NEW SOURCE PERMITS REGISTRATION 162989
AIR NEW SOURCE PERMITS REGISTRATION 142135
AIR NEW SOURCE PERMITS REGISTRATION 143037
AIR NEW SOURCE PERMITS REGISTRATION 148316
AIR NEW SOURCE PERMITS REGISTRATION 146933
AIR NEW SOURCE PERMITS REGISTRATION 142133
AIR NEW SOURCE PERMITS REGISTRATION 146956
AIR NEW SOURCE PERMITS REGISTRATION 146154
AIR NEW SOURCE PERMITS REGISTRATION 160082
AIR NEW SOURCE PERMITS REGISTRATION 160920
AIR NEW SOURCE PERMITS REGISTRATION 173784
AIR NEW SOURCE PERMITS PERMIT AMOC242
AIR NEW SOURCE PERMITS REGISTRATION 176891
AIR NEW SOURCE PERMITS REGISTRATION 177265
AIR NEW SOURCE PERMITS REGISTRATION 177932
STORMWATER PERMIT TXR05FG09
WASTEWATER EPA ID TX0006327
POLLUTION PREVENTION PLANNING ID NUMBER P00193
INDUSTRIAL AND HAZARDOUS WASTE SOLID WASTE REGISTRATION # (SWR) 30019

Compliance History Period: September 01, 2019 to August 31, 2024 **Rating Year:** 2024 **Rating Date:** 09/01/2024

Date Compliance History Report Prepared: December 06, 2024

Agency Decision Requiring Compliance History: Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.

Component Period Selected: September 01, 2019 to August 31, 2024

TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.

Name: Louis Malarcher **Phone:** (512) 239-1151

Site and Owner/Operator History:

1) Has the site been in existence and/or operation for the full five year compliance period? YES
2) Has there been a (known) change in ownership/operator of the site during the compliance period? NO

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

1 Effective Date: 07/06/2020 ADMINORDER 2019-0503-AIR-E (1660 Order-Agreed Order With Denial)
Classification: Moderate
Citation: 30 TAC Chapter 101, SubChapter F 101.201(a)(1)(B)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)

Rqmt Prov: General Terms and Condition OP
Special Terms and Condition 2F OP

Description: Failed to submit an initial notification for a reportable emissions event no later than 24 hours after the discovery of an emissions event. Specifically, the initial notification for Incident No. 302018 was due by January 31, 2019 at 1:15 p.m., but was not submitted until January 31, 2019 at 5:04 p.m.
Classification: Major

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)

Rqmt Prov: General Terms and Condition OP
Special Conditions 1 PERMIT
Special Terms and Condition 13 OP

Description: Failed to prevent unauthorized emissions.Specifically, the Respondent released 781 pounds of volatile organic compounds as fugitive emissions, during an emissions event (Incident No. 302018) that began on January 30, 2019 and lasted 34 hours. The emissions event occurred due to the overfilling of the decanter tank with methyl acrylate, which was drained into a secondary containment that had a large surface area exposed to high winds, resulting in the release to the atmosphere. Since the Respon

2 Effective Date: 11/20/2020 ADMINORDER 2019-0878-AIR-E (1660 Order-Agreed Order With Denial)
Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)

Rqmt Prov: General Terms and Conditions OP
Special Condition 1 PERMIT
Special Term and Condition 13 OP

Description: Failure to prevent unauthorized emissions.

3 Effective Date: 04/06/2021 ADMINORDER 2019-1697-AIR-E (Findings Order-Agreed Order Without Denial)
Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)

Rqmt Prov: General Terms and Conditions OP
Special Condition 1 PERMIT
Special Terms and Condition 13 OP

Description: Failure to prevent unauthorized emissions to the atmosphere during Incident 316626.
Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)

Rqmt Prov: General Terms and Conditions OP
Special Condition 1 PERMIT
Special Term and Condition 13 OP

Description: Failure to prevent unauthorized emissions to the atmosphere during Incident 320164.

4 Effective Date: 08/22/2023 ADMINORDER 2021-0089-AIR-E (1660 Order-Agreed Order With Denial)
Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)

Rqmt Prov: FOP No. O2001 OP
General Terms and Conditions OP
Special Condition 1 PERMIT

Description: Failed to prevent unauthorized emissions. Specifically, the Respondent released 15,358.00 pounds ("lbs") of volatile organic compounds ("VOC") as fugitive emissions, during an emissions event (Incident No. 341085) that occurred on August 22, 2020 and lasted 15 minutes. The emissions event occurred when the incorrect packing was used during the overhaul of an automatic valve that caused a leak, resulting in the release to the atmosphere.
Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)

Rqmt Prov: FOP No. O2001 OP
General Terms and Conditions OP
Special Condition 1 OP

Description: Failed to prevent unauthorized emissions, in violation of 30 TEX. ADMIN. CODE §§ 116.115(c) and 122.143(4), NSR Permit No. 9176, SC No. 1, FOP No. O2001, GTC and STC No. 12, and TEX. HEALTH & SAFETY CODE § 382.085(b). Specifically, the Respondent released 11,892.00 lbs of VOC as fugitive emissions, during an emissions event (Incident No. 344343) that occurred on October 18, 2020 and lasted 20 minutes. The emissions event occurred due to a missing mechanical plug from an autoclave block,
Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)

Rqmt Prov: FOP No. O2001 OP
General Terms and Conditions OP
Special Condition 1 PERMIT

Description: Failed to prevent unauthorized emissions. Specifically, the Respondent released 11,428.00 lbs of VOC as fugitive emissions, during an emissions event (Incident No. 347122) that occurred on December 4, 2020 and lasted 49 minutes. The emissions event occurred when the C Unit received cold ethylene gas from outside the C Unit Batter limits that caused thermal contractions and the packing leak, resulting in the release to the atmosphere.
Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)

Rqmt Prov: FOP No. O2001 OP
General Terms and Conditions OP
Special Condition 1 OP

Description: Failed to prevent unauthorized emissions. Specifically, the Respondent released 15,253.00 lbs of VOC as fugitive emissions, during an emissions event (Incident No. 364400) that occurred on August 6, 2021 and lasted ten minutes. The emissions event occurred due to a leak from the hypercompressor discharge purge valve packing, resulting in the release to the atmosphere.

See addendum for information regarding federal actions.

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:

N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

Item 1	September 12, 2019	(1596543)
Item 2	September 24, 2019	(1606397)
Item 3	September 25, 2019	(1597057)
Item 4	October 11, 2019	(1613243)
Item 5	November 04, 2019	(1604885)
Item 6	November 15, 2019	(1619057)
Item 7	December 19, 2019	(1617426)
Item 8	December 30, 2019	(1606152)
Item 10	February 10, 2020	(1625458)
Item 11	February 12, 2020	(1625720)
Item 12	February 20, 2020	(1640669)
Item 14	March 24, 2020	(1647189)
Item 15	April 10, 2020	(1633580)
Item 16	April 24, 2020	(1653525)
Item 17	April 28, 2020	(1645395)
Item 18	May 22, 2020	(1660112)
Item 19	June 10, 2020	(1666616)
Item 20	June 25, 2020	(1651829)
Item 21	June 29, 2020	(1657425)

Item 22	July 07, 2020	(1658368)
Item 23	July 20, 2020	(1673573)
Item 24	July 29, 2020	(1664847)
Item 25	August 04, 2020	(1665903)
Item 26	August 06, 2020	(1666062)
Item 27	August 07, 2020	(1665817)
Item 28	August 18, 2020	(1680349)
Item 29	September 18, 2020	(1686917)
Item 30	November 13, 2020	(1712482)
Item 31	November 19, 2020	(1690507)
Item 32	November 20, 2020	(1690466)
Item 33	December 10, 2020	(1712483)
Item 34	December 18, 2020	(1678495)
Item 35	January 11, 2021	(1698919)
Item 36	January 18, 2021	(1712484)
Item 37	February 22, 2021	(1725537)
Item 38	February 27, 2021	(1702347)
Item 39	March 12, 2021	(1725538)
Item 40	April 14, 2021	(1725539)
Item 42	May 05, 2021	(1702362)
Item 43	May 14, 2021	(1708035)
Item 44	May 18, 2021	(1740074)
Item 45	June 10, 2021	(1725056)
Item 46	June 14, 2021	(1724663)
Item 47	July 19, 2021	(1751713)
Item 48	August 12, 2021	(1757177)
Item 49	August 26, 2021	(1751073)
Item 50	September 12, 2021	(1766257)
Item 51	October 11, 2021	(1764992)
Item 52	October 13, 2021	(1763188)
Item 53	October 18, 2021	(1776720)
Item 54	October 21, 2021	(1764526)
Item 55	November 09, 2021	(1783629)
Item 56	December 08, 2021	(1790655)
Item 57	January 20, 2022	(1798449)
Item 58	February 21, 2022	(1806323)
Item 59	March 17, 2022	(1813390)
Item 60	May 09, 2022	(1810457)
Item 61	May 23, 2022	(1828800)
Item 62	June 29, 2022	(1825220)
Item 63	August 22, 2022	(1834387)
Item 64	November 10, 2022	(1853673)
Item 65	November 22, 2022	(1869499)
Item 66	December 12, 2022	(1862014)
Item 67	January 02, 2023	(1862065)
Item 68	January 09, 2023	(1865924)
Item 69	January 19, 2023	(1882169)
Item 70	February 20, 2023	(1889985)
Item 71	March 17, 2023	(1898544)
Item 72	March 29, 2023	(1894572)
Item 73	April 11, 2023	(1905332)
Item 74	May 12, 2023	(1879750)
Item 75	May 17, 2023	(1912516)
Item 76	June 12, 2023	(1919118)
Item 77	June 28, 2023	(1879749)
Item 78	July 24, 2023	(1926083)
Item 79	August 17, 2023	(1845890)
Item 80	August 18, 2023	(1933046)

Item 81	September 25, 2023	(1939182)
Item 82	October 23, 2023	(1929951)
Item 83	October 24, 2023	(1946033)
Item 84	November 21, 2023	(1951725)
Item 85	December 21, 2023	(1961487)
Item 86	January 03, 2024	(1945249)
Item 87	January 22, 2024	(1968082)
Item 88	February 23, 2024	(1977146)
Item 89	March 18, 2024	(1983711)
Item 90	March 19, 2024	(1981776)
Item 91	April 22, 2024	(1990241)
Item 92	May 20, 2024	(1996698)
Item 93	June 18, 2024	(2003649)
Item 94	July 17, 2024	(2011202)
Item 95	August 16, 2024	(2016806)

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

1 Date: 01/17/2024 (1950543)
Self Report? NO Classification: Moderate
Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 4.A PERMIT
Special Terms and Conditions 10 PERMIT
Description: Failure to maintain Barge Dock Thermal Abater temperature above 1784 degrees Fahrenheit.

2 Date: 01/17/2024 (1950337)
Self Report? NO Classification: Minor
Citation: 30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 6 PERMIT
Description: Failure to maintain hourly nitrogen oxides (NOx) emissions below maximum allowable emission rate table (MAERT) limit.

3 Date: 01/29/2024 (1951076)
Self Report? NO Classification: Moderate
Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)(1)
30 TAC Chapter 305, SubChapter F 305.125(1)
PC Pg. 8, No. 2(g) PERMIT
Description: Failure by Dow Sabine River Operations (Dow) to prevent Unauthorized Discharges (UDs) into or adjacent to the waters of the state at any location not permitted as an outfall.

4 Date: 02/12/2024 (1950735)
Self Report? NO Classification: Moderate
Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 5(C) PERMIT
Special Terms and Conditions 5 PERMIT
Description: Failure to record equipment differential pressure readings.
Self Report? NO Classification: Moderate
Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 5(A) PERMIT
Special Terms and Conditions 5 PERMIT
Description: Failure to conduct visible emissions observations.

Compliance History Report for CN600356976, RN100542711, Rating Year 2024 which includes Compliance History (CH) components from September 01, 2019, through August 31, 2024.

5 Date: 04/12/2024 (1973084)

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 111, SubChapter A 111.111(a)(1)(B)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 3.A PERMIT

Description: Failure to prevent visible emissions.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 10 PERMIT

Description: Failure to complete degreaser inspections.

6 Date: 05/10/2024 (1974351)

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)(C)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT

Description: Failure to submit a complete and accurate semi-annual deviation report (DR) within 30 days after the end of the reporting/certification period.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 115, SubChapter D 115.354(11)
30 TAC Chapter 115, SubChapter D 115.354(2)(C)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1025(b)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1027(b)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT YY 63.1103(e)
5C THSC Chapter 382 382.085(b)
Special Condition 11.E PERMIT
Special Condition 11.F PERMIT
Special Terms and Conditions 18 PERMIT
Special Terms and Conditions 1A PERMIT

Description: Failure to monitor components.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 115, SubChapter D 115.352(4)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1033(b)(1)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT YY 63.1103(e)(3)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions 18 PERMIT
Special Condition 11.E PERMIT

Description: Failure to cap open ended lines.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 9.C (2) PERMIT
Special Terms and Conditions 18 PERMIT

Description: Failure to conduct Weekly Cooling tower sampling for conductivity and total dissolved solids.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 117, SubChapter B 117.110(a)(2)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 17.A PERMIT
Special Terms and Conditions 18 PERMIT
Special Terms and Conditions 1A PERMIT

Description: Failure to maintain authorized Nitrogen Oxide (NOx) pounds per metric million British thermal units (lbs/mmbtu) limits for EPN PK-11.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT

Special Terms and Conditions 18 PERMIT

Description: Failure to maintain carbon monoxide (CO) limits for EPN PK-2.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT
Special Condition 17.B PERMIT
Special Terms and Conditions 18 PERMIT

Description: Failure to maintain authorized Nitrogen Oxide (NOx) pounds per hour (lbs/hr), and pounds per metric million British thermal units (lbs/mmbtu) limits for EPN PK-12.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT
Special Condition 17.B PERMIT
Special Terms and Conditions 18 PERMIT

Description: Failure to maintain carbon monoxide (CO) limits for EPN PK-12.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter F 101.201(b)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 2.F PERMIT

Description: Failure to record non-reportable incident within 14 days of the incident.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 115, SubChapter B 115.121(a)(1)
30 TAC Chapter 115, SubChapter B 115.122(a)(2)(B)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 17 PERMIT
Special Terms and Conditions 18 PERMIT
Special Terms and Conditions 1A PERMIT

Description: Failure to maintain the carbon monoxide (CO) 50 parts per million limit.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 17. A PERMIT
Special Terms and Conditions 18 PERMIT

Description: Failure to maintain carbon monoxide (CO) lbs/mmbtu limits for EPN-PK-4.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT DDDDD 63.7515(a)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 1A PERMIT

Description: Failure to conduct the annual Boiler MACT test within the 13-month deadline.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Conditions 17.A PERMIT
Special Condition 1 PERMIT
Special Terms and Conditions 1A PERMIT

Description: Failure to maintain authorized Nitrogen Oxide (NOx) pounds per hour (lbs/hr), and pounds per metric million British thermal units (lbs/mmbtu) limits for EPN PK-2.

7 Date: 07/17/2024 (1982871)

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 7 PERMIT

Special Terms and Conditions 16 PERMIT

Description: Failure to ensure the Regenerative Thermal Oxidizer's (RTO) average temperature value was maintained.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter A 101.20(1)
30 TAC Chapter 101, SubChapter A 101.20(2)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 60, SubChapter C, PT 60, SubPT A 60.18(c)(3)(ii)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.11(b)(6)(ii)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2450(e)(2)
5C THSC Chapter 382 382.085(b)
Special Condition 5.A PERMIT
Special Condition 6.B PERMIT
Special Condition 7.A PERMIT
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to maintain CDG flare BTU hourly average.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter A 101.20(1)
30 TAC Chapter 101, SubChapter A 101.20(2)
30 TAC Chapter 111, SubChapter A 111.111(a)(4)(A)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 60, SubChapter C, PT 60, SubPT A 60.18(c)(1)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.11(b)(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2450(e)(2)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT SS 63.982(b)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT SS 63.987(a)
5C THSC Chapter 382 382.085(b)
Special Condition 7.C PERMIT
Special Terms and Conditions 1.A PERMIT

Description: Failure to operate CDG flare without visible emissions.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 115, SubChapter D 115.352(2)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 3.H PERMIT
Special Condition 3.I PERMIT
Special Condition 5.H PERMIT
Special Condition 5.I PERMIT
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to conduct follow-up monitoring.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter F 101.201(b)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 2.F PERMIT

Description: Failure to record non-reportable incident within 14 days of the incident.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)
30 TAC Chapter 122, SubChapter B 122.146(5)(C)
30 TAC Chapter 122, SubChapter B 122.146(5)(D)
30 TAC Chapter 122, SubChapter B 122.165(b)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT

Description: Failure to submit an accurate deviation report.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 111, SubChapter A 111.111(a)(1)(A)
30 TAC Chapter 111, SubChapter A 111.111(a)(1)(B)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 3.A PERMIT

Description: Failure to prevent an opacity condition.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter A 101.20(2)
30 TAC Chapter 115, SubChapter D 115.352(4)

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2450(a)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2480(a)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1033(b)(1)
5C THSC Chapter 382 382.085(b)
Special Condition 3.E PERMIT
Special Condition 4.A PERMIT
Special Condition 4.B PERMIT
Special Condition 5 PERMIT
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to cap open ended lines.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter A 101.20(2)
30 TAC Chapter 115, SubChapter D 115.356(2)(E)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2450(a)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2480(a)
5C THSC Chapter 382 382.085(b)
Special Condition 3.J PERMIT
Special Condition 5.J PERMIT
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to maintain records.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)(A)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT

Description: Failure to report all deviations.

8 Date: 07/29/2024 (1989166)

Self Report? NO Classification: Minor

Citation: 30 TAC Chapter 101, SubChapter F 101.201(b)(1)(D)
30 TAC Chapter 101, SubChapter F 101.201(b)(1)(H)
5C THSC Chapter 382 382.085(b)

Description: Failure to submit an accurate final record associated with emissions event, TCEQ/STEERS Incident No. 422909.

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT

Description: Failure to prevent unauthorized emissions to the atmosphere during an emissions event that was discovered on May 10, 2024, TCEQ/STEERS Incident No. 422909. {EIC B18(g)(13)}

F. Environmental audits:

Disclosure Date: 02/24/2020

Viol. Classification: Minor

Citation: 30 TAC Chapter 307 307.4(b)
30 TAC Chapter 307 307.4(d)

Rqmt Prov: PERMIT Part III, Sect. A.(3)
PERMIT Part III, Sect. E.(2)(b)
PERMIT Part III, Section A.(4)

Description: The Stormwater Pollution Prevention Plan (SWPPP) does not include hydro-blasting in Section 3 (potential non-storm water sources) and Section 4 (potential pollutant source). Section 5 (measures and controls) does not include the measures and controls for areas that drain to Outfall 005 as storage and the maintenance areas that are located in this area.

Viol. Classification: Minor

Citation: 30 TAC Chapter 307 307.4(b)
30 TAC Chapter 307 307.4(d)

Rqmt Prov: PERMIT Part III, Sect. A.(3)

Compliance History Report for CN600356976, RN100542711, Rating Year 2024 which includes Compliance History (CH) components from September 01, 2019, through August 31, 2024.

PERMIT Part III, Sect. A.(4)

PERMIT Part III, Sect. E.(2)(b)

Description: A creosote treated utility pole and oil sheen was observed in the center of the Outfall 002 ditch at the outfall discharge location.

Viol. Classification: Minor

Citation: 30 TAC Chapter 307 307.4(b)

30 TAC Chapter 307 307.4(d)

Rqmt Prov: PERMIT Part III, Sect E. (2)(b)

PERMIT Part III, Sect. A(3)

PERMIT Part III, Sect. A. (4)

PERMIT Part III, Sect. E.(2)(b)

Description: Heavy erosion was observed around and on the culvert at Outfall 005.

Viol. Classification: Minor

Citation: 30 TAC Chapter 307 307.4(b)

30 TAC Chapter 307 307.4(d)

Rqmt Prov: PERMIT Part III, Sect. A.(3)

PERMIT Part III, Sect. A.(4)

PERMIT Part III, Sect. E.(2)(b)

Description: Non-stormwater (hydro blasting operation area) intermittently overflows a trench and drains to a ditch that feeds Stormwater Outfall 004.

Viol. Classification: Minor

Citation: 30 TAC Chapter 307 307.4(b)

30 TAC Chapter 307 307.4(d)

Rqmt Prov: PERMIT Part III, Sect. B.(2)

PERMIT Part III, Sect. B.(3)

Description: Quarterly inspection forms do not currently include a section for deficiencies observed and corrective actions taken.

Viol. Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.110(a)

30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)

Rqmt Prov: PERMIT SC 1

OP ST&C 5

Description: The CSD plant contains additional filter vents that are not included in the NSR permit authorization.

Viol. Classification: Moderate

Citation: 30 TAC Chapter 122, SubChapter B 122.132(d)(2)

30 TAC Chapter 122, SubChapter B 122.132(d)(3)

Description: Title V permit 01899 for Site Services does not include the solvent cleaning stations (degreasers) emission units.

Disclosure Date: 08/25/2020

Viol. Classification: Minor

Citation: 40 CFR Chapter 63, SubChapter C, PT 63, SubPT GGGGG 63.7951

40 CFR Chapter 63, SubChapter C, PT 63, SubPT GGGGG 63.7952

Description: Recordkeeping and Reporting for material potentially subject to Site Remediation MACT has not been performed.

Viol. Classification: Minor

Citation: 30 TAC Chapter 115, SubChapter D 115.352(2)

30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)

40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1024(a)

Rqmt Prov: PERMIT SC 3H

PERMIT SC 5H

Description: For fugitive leaks, follow-up monitoring was not completed within the required timeframe after a first repair attempt.

Notice of Intent Date: 02/24/2020 (1637676)

Disclosure Date: 08/26/2020
Viol. Classification: Minor
Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)
Rqmt Prov: OP ST & C 3
Description: The plant was missing the second quarter opacity observation records.

Viol. Classification: Moderate
Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
Rqmt Prov: PERMIT SC 10A
OP ST & C 5
Description: The Waste Acid Tank permitted throughput is too low. The Permit limit specified in the special condition based on this permitted value is unachievable.

Viol. Classification: Moderate
Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
Rqmt Prov: PERMIT SC 8
OP ST & C 5
Description: The limit on simultaneous hopper usage in B165 is unachievable.

Notice of Intent Date: 03/20/2020 (1640110)
Disclosure Date: 02/25/2021
Viol. Classification: Minor
Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
Rqmt Prov: PERMIT SC 10
OP ST & C 13
Description: The Flame Ionization Detector on the vent stream to the RTO is not providing accurate data

Notice of Intent Date: 05/08/2020 (1652641)
Disclosure Date: 03/24/2021
Viol. Classification: Minor
Citation: 30 TAC Chapter 111, SubChapter A 111.111(a)(4)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.11(b)(4)
Rqmt Prov: PERMIT SC ;7.C.
OP STC 1, 8, and 13
Description: Intermittent visible emissions on COG Flare (PL-22) while the plant implements and tunes control systems for future NHVcz parameter as required by emerging flare requirements.

Notice of Intent Date: 10/04/2020 (1679562)
No DOV Associated

Notice of Intent Date: 11/19/2020 (1708587)
Disclosure Date: 02/25/2021
Viol. Classification: Moderate
Citation: 30 TAC Chapter 113, SubChapter C 113.890
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2475
Rqmt Prov: PERMIT Gen. Cond 1, SC, 1, 5.B., and 8
OP ST & C 1.E. and 13
Description: Emission controls to East and West Fume Abators (EPNs PL-10 and PL-12} at 82085 {FIN PL7W) are not in operation.

Viol. Classification: Moderate
Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)
Rqmt Prov: OP GT and C 13

PERMIT GVC1 and SC 2

Description: Vapor equalization system at 1087 (FIN PL7V} not in use.

Viol. Moderate

Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)

Rqmt Prov: PERMIT GC 1 and SC 1

OP ST and C 13

Description: Exceeded permitted throughputs on transfer racks at 82085 and 81087.

Notice of Intent Date: 01/15/2021 (1706985)

No DOV Associated

Notice of Intent Date: 01/15/2021 (1706987)

No DOV Associated

Notice of Intent Date: 01/15/2021 (1706992)

No DOV Associated

Notice of Intent Date: 06/30/2021 (1749325)

Disclosure Date: 08/26/2021

Viol. Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)

Rqmt Prov: PERMIT SC 5B and 5C

OP ST&C 15

Description: Failure to conduct and record inspections of control device bypass valves.

Disclosure Date: 12/23/2021

Viol. Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)

Rqmt Prov: PERMIT SC 6.E.

OP ST&C 15

Description: Failure to maintain records of stored material when LAD is stored in the HAD tank and HAD stored in the LAD tank.

Notice of Intent Date: 06/30/2021 (1749326)

Disclosure Date: 08/26/2021

Viol. Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)

Rqmt Prov: PERMIT SC 23.B

OP ST&C 16

Description: Failure to comply with the 200 hours per year limit on operation and use of EPN PL-4V.

Disclosure Date: 12/23/2021

Viol. Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115

30 TAC Chapter 122, SubChapter B 122.143(4)

Rqmt Prov: PERMIT SC 13.B

OP ST&C 16

Description: Failure to maintain monthly tank records.

Viol. Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)

Rqmt Prov: PERMIT SC 15

OP ST&C 16

Description: Failure to maintain monthly VOC records for railcar unloading.

Disclosure Date: 05/26/2022

Viol. Moderate

Viol.
Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
Rqmt Prov: PERMIT SC 23.D
OP ST&Cs 16
Description: Failure to comply with the 24 hour time limit for use of EPN PI-19.

Notice of Intent Date: 05/19/2022 (1819257)
Disclosure Date: 11/28/2022
Viol. Classification: Moderate
Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
Rqmt Prov: PERMIT SC 5.A
OP ST&C 5
Description: Failure to include all filter vent sources in the daily inspection of filter vents at the Copolymer Specialties Division plant.
Viol. Classification: Moderate
Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
Rqmt Prov: PERMIT SC 4.B.
OP ST&C 10
Description: Failure to maintain a barge dock thermal abater temperature calibration annual record for 2020.

Notice of Intent Date: 06/24/2022 (1825896)
Disclosure Date: 11/29/2022
Viol. Classification: Minor
Citation: 30 TAC Chapter 115, SubChapter D 115.354(2)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1022(c)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1027(b)(3)
Rqmt Prov: PERMIT SC 3.D
PERMIT SC 5.D
PERMIT SC 9.D and 9.F
OP ST&C 1.E & 10
OP ST&C 1.E. & 16
OP ST&C 1.F & 18
Description: Failure to conduct fugitive monitoring at required frequency due to misidentification.
Viol. Classification: Minor
Citation: 30 TAC Chapter 115, SubChapter D 115.352(2)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1024(d)
Rqmt Prov: PERMIT SC 10.I & 11.H
OP ST&C 1.F & 18
Description: Failure to monitor components on the delay of repair list that did not qualify, resulting in component repairs occurring after deadlines.
Disclosure Date: 04/28/2023
Viol. Classification: Minor
Citation: 30 TAC Chapter 115, SubChapter D 115.356(1)(D)
Description: Failure to maintain delay of repair documentation for some components on the DOR list.
Viol. Classification: Moderate
Citation: 40 CFR Chapter 63, SubChapter C, PT 63, SubPT YY 63.1107(e)(2)
Rqmt Prov: OP ST&C 1.F and 18
Description: Failure to conducted monitoring within 5 days of a pressure relief device returning to service after lifting.
Viol. Classification: Moderate
Citation: 30 TAC Chapter 115, SubChapter D 115.354
Rqmt Prov: PERMIT SC 3

OP ST&Cs 1.E and 16

Description: Failure to monitor fugitive components that weren't included in the LDAR program.

Disclosure Date: 05/25/2023

Viol. Minor

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)

Rqmt Prov: PERMIT SC 4

OP ST&C 16

Description: Failure to conduct quarterly monitor all connector in gas/vapor and light liquid service within the G unit.

Notice of Intent Date: 07/29/2022 (1839896)

No DOV Associated

Notice of Intent Date: 08/26/2022 (1841964)

No DOV Associated

Notice of Intent Date: 09/30/2022 (1852756)

No DOV Associated

Notice of Intent Date: 10/21/2022 (1855391)

No DOV Associated

Notice of Intent Date: 01/20/2023 (1879513)

No DOV Associated

Notice of Intent Date: 02/16/2023 (1886260)

No DOV Associated

Notice of Intent Date: 05/24/2023 (1906312)

No DOV Associated

Notice of Intent Date: 07/24/2023 (1918470)

Disclosure Date: 11/28/2023

Viol. Moderate

Citation: 30 TAC Chapter 122, SubChapter B 122.143

Rqmt Prov: OP Representations

Description: Failure to reflect unloading materials to the bioponds in the Title V Permit O1899.

Viol. Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)

Rqmt Prov: PERMIT SC 1

OP SC 6 & 8

PERMIT SCs

Description: Failure to ensure the MAERT for CTG1 and CTG2 are correctly published in the permit issued.

Notice of Intent Date: 08/15/2023 (1924381)

No DOV Associated

Notice of Intent Date: 09/08/2023 (1931406)

No DOV Associated

Notice of Intent Date: 09/08/2023 (1931410)

Disclosure Date: 11/28/2023

Viol. Moderate

Citation: 30 TAC Chapter 305, SubChapter F 305.125(1)

Rqmt Prov: PERMIT Stardard Methods

Description: The SOP's for compliance methods do not have documented control limits for method blanks, lab fortified blanks, matrix spikes and/or matrix spike duplicates or lab duplicates. The SOP's do not have the specified QC practices, frequency and acceptance criteria and required corrective actions if acceptance criteria are not met.

Viol. Moderate

Viol.
Citation: 30 TAC Chapter 305, SubChapter F 305.125(1)

Rqmt Prov: PERMIT Standard Methods

Description: The TSS SOP does not contain the requirement to run a method blank and a lab fortified blank with each batch of 20 or fewer samples. The lab is not complying with this requirement as they are not analyzing a fortified blank with any of the sample batches and are running a method blank only one day per week.

Viol. Classification: Moderate

Citation: 30 TAC Chapter 305, SubChapter F 305.125(1)

Rqmt Prov: PERMIT Standard Methods

Description: The lab's Biological Oxygen Demand - 5 day (BODS) & Carbonaceous Biological Oxygen Demand - 5 day (CBODS) SOP does not include the method requirement of checking the pH of the sample and adjusting the pH to between 6.5 and 7 .5 if the initial pH of the sample is below 6.0 or above 8.0.

Viol. Classification: Moderate

Citation: 30 TAC Chapter 305, SubChapter F 305.125(1)

Rqmt Prov: PERMIT Standard Methods

Description: The lab has no completed and approved SOP for the Oil & Grease method (EPA1664) which they perform in support of the site Texas Pollutant Discharge Elimination System (TPDES) permit. In addition, the draft method does not state which version of EPA method 1664 is being used by the lab.

Viol. Classification: Moderate

Citation: 30 TAC Chapter 305, SubChapter F 305.125(1)

Rqmt Prov: PERMIT Standard Methods

Description: The laboratory bench sheet does not have a place to indicate the initial pH of the sample or the resulting pH if pH adjustment is needed and does note indicate the date and time that the final dissolved oxygen readings are taken after the 5-day incubation period. SM 5210B indicates that the final dissolved oxygen readings must take place within 5 days+/- 6 hours of initial incubation.

Viol. Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.110(a)

Description: A burn-off oven at the laboratory used to remove residue from metal strainers used in the laboratory is not authorized under an air permit.

Viol. Classification: Moderate

Citation: 40 CFR Chapter 60, SubChapter C, PT 60, SubPT JJJJ 60.4245(b)

Rqmt Prov: OP ST&Cs

Description: A 62-HP SI ICE manufactured in 2012 that does not meet the standards applicable to non-emergency engines is used to run the Radio Tower generator in emergencies. The records for this category engine are incomplete.

Viol. Classification: Moderate

Citation: 30 TAC Chapter 305, SubChapter F 305.125(1)

Rqmt Prov: PERMIT Standard Methods

Description: The laboratory is using a chemical reagent for the CN analysis that was superseded in the latest edition of the Standard Methods.

Notice of Intent Date: 11/09/2023 (1944007)

Disclosure Date: 05/29/2024

Viol. Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)

Rqmt Prov: PERMIT SC 4.A
OP ST 10

Description: Failed to maintain Barge Dock Thermal Abater above 1784°F, average temperature established during the last performance to demonstrate destruction efficiency.

Notice of Intent Date: 01/26/2024 (1965098)

Disclosure Date: 11/21/2024

Viol. Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter F 101.201
30 TAC Chapter 116, SubChapter B 116.115(c)

Rqmt Prov: PERMIT Special conditions 1
PERMIT Special conditions 18

Description: Failed to prevent aqueous organics from flowing to cooling water pond resulting in unpermitted VOC release.

Viol. Classification: Minor

Citation: 30 TAC Chapter 101, SubChapter A 101.20(2)
40 CFR Chapter 61, SubChapter C, PT 61, SubPT FF 61.340
40 CFR Part 61, Subpart FF 61.359

Description: Failed to prevent aqueous organics from flowing to cooling water pond resulting in BWON recordkeeping, reporting, and control requirements not being met

Notice of Intent Date: 02/09/2024 (1966496)
No DOV Associated

Notice of Intent Date: 03/01/2024 (1973566)
No DOV Associated

Notice of Intent Date: 03/15/2024 (1974044)
No DOV Associated

Notice of Intent Date: 03/29/2024 (1974936)
Disclosure Date: 11/21/2024

Viol. Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter A 101.20(2)
30 TAC Chapter 115, SubChapter B 115.136(a)(2)
30 TAC Chapter 116, SubChapter B 116.115(c)
40 CFR Chapter 61, SubChapter C, PT 61, SubPT FF 61.354(d)

Rqmt Prov: PERMIT Special conditions 3.B
PERMIT Special terms & conditions 18

Description: Failed to take AP/ Carbon bed breakthrough measurements at the outlet vent rather than a bleed.

Viol. Classification: Moderate

Citation: 30 TAC Chapter 115, SubChapter B 115.136(a)(2)
30 TAC Chapter 116, SubChapter B 116.115(c)

Rqmt Prov: PERMIT Special terms & conditions 1.A

Description: Failed to continuously measure and record Steam Stripper Carbon Beds, Surge Tank Carbon Canister, and AP/ Separator Carbon Canister {PK-30, PK-75, and PK-76) carbon breakthrough measurements.

Notice of Intent Date: 04/02/2024 (1974941)
No DOV Associated

Notice of Intent Date: 08/23/2024 (2008855)
No DOV Associated

G. Type of environmental management systems (EMSs):
N/A

H. Voluntary on-site compliance assessment dates:
N/A

I. Participation in a voluntary pollution reduction program:
N/A

J. Early compliance:
N/A

Sites Outside of Texas:
N/A

Component Appendices

Appendix A
All NOVs Issued During Component Period 9/1/2019 and 8/31/2024

1 Date: 11/20/2019 (1603335)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)(A)
5C THSC Chapter 382 382.085(b)
General Term and Conditions OP

Description: Failure to submit Title V Deviation Reports (DRs) within 30 days after the end of the reporting period.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.146(1)(C)
30 TAC Chapter 122, SubChapter B 122.146(2)
5C THSC Chapter 382 382.085(b)
General Term and Conditions OP
Special Term and Condition 11 OP
Special Term and Condition 16 OP
Special Term and Condition 18 OP

Description: Failure to submit Permit Compliance Certifications (PCCs) within 30 days after the end of the reporting period.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Term and Conditions OP
Special Condition 14 PERMIT
Special Term and Condition 13 OP

Description: Failure to maintain the Regenerative Thermal Oxidizer (RTO) temperature equal to or above 1500 degrees Fahrenheit when waste gas is directed to the RTO.

Self Report? NO Classification: Minor

Citation:
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT EEE 63.1209(a)(2)
5C THSC Chapter 382 382.085(b)
General Term and Conditions OP
Special Condition 15K PERMIT
Special Term and Condition 15 OP
Special Term and Condition 1A OP

Description: Failure to conduct a daily system audit.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT EEE 63.1206(c)(3)(vii)
5C THSC Chapter 382 382.085(b)
General Term and Conditions OP
Special Condition 15K PERMIT
Special Term and Condition 15 OP
Special Term and Condition 1A OP

Description: Failure to conduct a weekly automatic waste feed cut off (AWFCO) test.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 61, SubChapter C, PT 61, SubPT FF 61.345(a)(1)(i)
5C THSC Chapter 382 382.085(b)
General Term and Conditions OP
Special Condition 15H PERMIT

Special Term and Condition 15 OP
Special Term and Condition 1A OP

Description: Failure to conduct initial monitoring of benzene waste operation containers.

2 Date: 11/22/2019 (1605607)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.10(d)(5)(i)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.10(e)(3)(vi)(L)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT DD 63.697(a)(2)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT EEE 63.1211(a)
5C THSC Chapter 382 382.085(b)
General Term and Conditions OP
Special Condition 15J PERMIT
Special Condition 15K PERMIT
Special Term and Condition 11 OP
Special Term and Condition 15 OP
Special Term and Condition 1A OP

Description: Failure to certify the 40 Code of Federal Regulations (CFR) 63, Subpart EEE and DD report.

3 Date: 11/30/2019 (1626409)

Self Report? YES Classification: Moderate

Citation:

2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)

Description: Failure to meet the limit for one or more permit parameter

4 Date: 12/31/2019 (1634050)

Self Report? YES Classification: Moderate

Citation:

2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)

Description: Failure to meet the limit for one or more permit parameter

5 Date: 01/29/2020 (1616832)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)(A)
5C THSC Chapter 382 382.085(b)
General Term and Conditions OP

Description: Failure to submit Title V Deviation Reports (DRs) within 30 days after the end of the reporting period.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.146(1)(C)
30 TAC Chapter 122, SubChapter B 122.146(2)
5C THSC Chapter 382 382.085(b)
General Term and Conditions OP
Special Term and Condition 13 OP
Special Term and Condition 6 OP
Special Term and Condition 8 OP

Description: Failure to submit Permit Compliance Certifications (PCCs) within 30 days after the end of the reporting period.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)

General Term and Conditions OP
Special Condition 7E PERMIT
Special Term and Condition 10 OP

Description: Failure to submit the sampling report for the Thermal Abater (Emission Point Number [EPN] PG-9) within 30 days after completion of sampling.

6 Date: 02/07/2020 (1624102)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.146(1)(C)
30 TAC Chapter 122, SubChapter B 122.146(2)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Term and Condition 12 OP

Description: Failure to submit the Permit Compliance Certification (PCC) within 30 days after the end of the reporting period.

7 Date: 04/03/2020 (1631637)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 1 PERMIT
Special Term and Condition 15 OP

Description: Failure to prevent unauthorized emissions to the atmosphere during Incident 326756.

8 Date: 06/23/2020 (1652075)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 6 PERMIT
Special Term and Condition 12 OP

Description: Failure to maintain the Regenerative Thermal Oxidizer (RTO), (Emission Point Number [EPN] PL-21), chamber combustion temperature no less than 1495 degrees Fehrenhiet (F).

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 4E PERMIT
Special Term and Condition 12 OP

Description: Failure to equip open-ended lines (OELs) with an appropriately sized cap, blind flange, plug or a second valve to seal the line.

9 Date: 09/30/2020 (1693264)

Self Report? YES Classification: Moderate

Citation:

2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)

Description: Failure to meet the limit for one or more permit parameter

10 Date: 10/23/2020 (1684477)

Self Report? NO Classification: Minor

Citation:

PC No. 2(g), Pg. 7 PERMIT

Description: Failure by Dow Performance Materials NA, Inc. (Dow) to prevent the Unauthorized Discharge (UD) of wastewater into or adjacent to waters of the state.

11 Date: 05/31/2021 (1747584)

Self Report? YES Classification: Moderate

Citation:

2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)

Description: Failure to meet the limit for one or more permit parameter

12 Date: 06/17/2021 (1723048)

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 3E OP
Special Terms and Conditions 6 OP

Description: Failure to record the vacuum pressure in the barge during Heavy Aromatic Distillate (HAD) loading operations.

13 Date: 08/16/2021 (1705155)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 111, SubChapter A 111.111(a)(4)(A)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 4C OP
Special Terms and Conditions 15 OP

Description: Failure to operate Flare EPN PK-16 with visible emissions for a period less than 5 minutes during any consecutive 2-hour period.

B17 Mod2D

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 115, SubChapter B 115.121(a)(2)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Terms and Conditions 13 OP

Description: Failure to maintain VOC permit limit of maximum 50 ppm on the carbon canisters.

B17 MOD 2g

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Conditions 19 OP
Special Terms and Conditions 18 OP

Description: Failure to maintain CEMS in working condition.

B1 Mod 2g

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 9C(2) OP
Special Terms and Conditions 15 OP

Description: Failure to collect weekly Cooling Tower sample for conductivity and total dissolved solids.

B1 MOD 2g

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 115, SubChapter D 115.352(4)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 10E OP
Special Terms and Conditions 15 OP
Special Terms and Conditions 1A OP

Description: Failure to maintain lines in VOC service with a cap, blind flange, plug, or secondary valve creating open-ended lines (OELs).

C10; Min 3d

14 Date: 08/17/2021 (1751469)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 115, SubChapter D 115.354(4)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 16 OP
Special Conditions 2 OP

Description: Failure to monitor the relief valve within 24 hours of venting.

B17 Mod2g

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 113, SubChapter C 113.890
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 60, SubChapter C, PT 60, SubPT A 60.18(c)(3)(ii)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.11(b)(6)(ii)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 16 OP
Special Condition 7A PERMIT

Description: Failure to maintain CDG Flare's British Thermal Units (BTUs) value above the minimum.

B17 MOD2g

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 113, SubChapter C 113.890
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 60, SubChapter C, PT 60, SubPT A 60.18(c)(2)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.11(b)(5)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 16 OP
Special Conditions 7B OP

Description: Failure to maintain a pilot flame for CDG flare.

B17 Moderate Bg

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 115, SubChapter D 115.354(4)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Terms and Conditions 1A OP

Description: Failure to monitor the Interstage cooler pressure relief valve within 24 hours after it was lifted.

B18(g)(1) MOD 2d

15 Date: 08/23/2021 (1736716)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)(C)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP

Description: Failure to submit a semiannual deviation report on time.

B3: Mod2B

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 61, SubChapter C, PT 61, SubPT FF 61.354(d)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Terms and Conditions 1A OP

Description: Failure to monitor carbon bed within 24 hours

B1; Mod2G

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT EEE 63.1206(c)(1)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Terms and Conditions 1A OP

Description: Failure to maintain the Afterburner Chamber (ABC) temperature above the minimum 1698 °F.

B17; mod 2G

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT EEE 63.1206(c)(1)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Terms and Conditions 1A OP

Description: Failure to maintain the Kiln Exit temperature above the minimum 1255 °F

B17; mod 2G

16 Date: 08/30/2021 (1756161)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 115, SubChapter B 115.121
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Conditions 6 OP
Special Terms and Conditions 12 OP

Description: Failure to maintain Regenerative Thermal Oxidizer (RTO) Emission Point Number (EPN) PL-21 combustion chamber temperature above the minimum.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 101, SubChapter F 101.201(b)
30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 1 OP
Special Condition 2 OP
Special Terms and Conditions 12 OP

Description: Failure to record a recordable event in timely manner.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 113, SubChapter C 113.1090
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT ZZZZ 63.6602
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 4c OP
Special Terms and Conditions 12 OP
Special Terms and Conditions 1E OP

Description: Failure to maintain the fuel flow at or above the minimum limit.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 115, SubChapter B 115.121
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 6 OP
Special Terms and Conditions 12 OP

Description: Failure to maintain RTO EPN PL-21 combustion chamber temperature above the minimum.

17 Date: 02/07/2022 (1774743)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 101, SubChapter F 101.201(b)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Terms and Conditions 2F OP

Description: Failure to create a final record of an emissions event within two weeks after the end of the event.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 113, SubChapter C 113.1090
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT ZZZZ 63.6602
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Conditions 4c OP
Special Terms and Condition 8 OP

Description: Failure to maintain the fuel flow at or above the minimum limit.

18 Date: 03/25/2022 (1773210)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 101, SubChapter F 101.201(b)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 2F OP

Description: Failure to create a final record of an emissions event within two weeks after the end of the event.

19 Date: 03/29/2022 (1679505)

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Term and Condition PERMIT
Special Condition 5(C) PERMIT
Special Terms and Conditions 7 OP

Description: Failure to maintain accurate records of pressure drop for EPN 534-BAG-1 .
EIC B3, Minor 3C

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)(A)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP

Description: Failure to report all deviations. EIC B3, Minor 3C

20 Date: 03/31/2022 (1819961)

Self Report? YES Classification: Moderate

Citation:

2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)

Description: Failure to meet the limit for one or more permit parameter

21 Date: 04/22/2022 (1809937)

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 290, SubChapter F 290.111(h)

Description: Failure by DuPont Sabine River Works to accurately complete the Surface Water Monthly Operating Reports (SWMORs).

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 290, SubChapter D 290.46(l)

Description: Failure by the Dow Chemical Company - Sabine River Operations to flush all dead-end mains on a monthly basis.

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 290, SubChapter D 290.46(f)(3)(A)(i)(II)

Description: Failure by the Dow Chemical Company - Sabine River Operations to maintain records of the amount of chemicals used daily.

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 290, SubChapter F 290.111(d)(2)(B)

Description: Failure by the Dow Chemical Company - Sabine River Operations to operate the plant as stated in the approved CT Study.

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 290, SubChapter D 290.46(m)

Description: Failure by the Dow Chemical Company - Sabine River Operations to perform maintenance and housekeeping practices used by a public water system to ensure the good working condition and general appearance of the system's facilities and equipment.

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 290, SubChapter D 290.46(m)

Description: Failure by the Dow Chemical Company - Sabine River Operations to perform maintenance and housekeeping practices used by a public water system to ensure the good working condition and general appearance of the system's facilities and equipment.

Self Report? NO Classification: Minor

Citation:
30 TAC Chapter 290, SubChapter D 290.42(d)(2)
30 TAC Chapter 290, SubChapter D 290.46(m)(4)
Description: Failure by the Dow Chemical Company - Sabine River Operations to maintain plant equipment tight against leakage.

Self Report? NO Classification: Minor

Citation:
30 TAC Chapter 290, SubChapter D 290.42(d)(13)
Description: Failure by the Dow Chemical Company - Sabine River Operations to identify all plant piping and chemical lines.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 290, SubChapter D 290.42(f)(1)(E)(ii)(I)
Description: Failure by the Dow Chemical Company - Sabine River Operations to provide adequate containment facilities for all liquid chemical storage tanks.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 290, SubChapter F 290.111(d)(2)(B)
Description: Failure by the Dow Chemical Company - Sabine River Operations to monitor the Combined Filter Effluent (CFE) at the proper locations.

Self Report? NO Classification: Minor

Citation:
30 TAC Chapter 290, SubChapter D 290.46(m)
Description: Failure by the Dow Chemical Company - Sabine River Operations to perform maintenance and housekeeping practices used by a public water system to ensure the good working condition and general appearance of the system's facilities and equipment.

Self Report? NO Classification: Minor

Citation:
30 TAC Chapter 290, SubChapter D 290.42(b)(5)
Description: Failure by the Dow Chemical Company - Sabine River Operations to maintain plant equipment tight against leakage.

Self Report? NO Classification: Minor

Citation:
30 TAC Chapter 290, SubChapter D 290.41(c)(3)(K)
Description: Failure by the Dow Chemical Company - Sabine River Operations to have all well openings to the atmosphere covered with a 16-mesh or finer, corrosion-resistant screening material or an acceptable equivalent.

22 Date: 05/31/2022 (1835092)

Self Report? YES Classification: Moderate

Citation:
2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)
Description: Failure to meet the limit for one or more permit parameter

23 Date: 06/30/2022 (1842297)

Self Report? YES Classification: Moderate

Citation:
2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)
Description: Failure to meet the limit for one or more permit parameter

24 Date: 07/29/2022 (1818343)

Self Report? NO Classification: Moderate

Citation:
PC, No. 2(g), Pg. 8 PERMIT
Description: Failure by Dow Chemical Company Sabine River Operations (Dow) to prevent the unauthorized discharge of wastewater or any other waste into or adjacent to water in the state at any location not permitted as an outfall.

Self Report? NO Classification: Minor

Citation:

OpR, No. 1, Pg. 10 PERMIT

Description: Failure by Dow Chemical Company Sabine River Operations (Dow) to ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. (stp)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 290, SubChapter D 290.46(m)(4)

Description: Failure by Dow Chemical Company Sabine River Operations (Dow) to maintain all water treatment units, storage and pressure maintenance facilities, distribution system lines, and related appurtenances shall be maintained in a watertight condition and be free of excessive solids.

Self Report? NO Classification: Minor

Citation:

M&RR, No. 2(a), Pg. 5 PERMIT

Description: Failure by Dow Chemical Company Sabine River Operations (Dow) to comply with test procedures specified in 30 TAC 319.11- 319.12. (staff gage)

Self Report? NO Classification: Minor

Citation:

M&RR, No. 5, Pg. 5 PERMIT

Description: Failure by Dow Chemical Company Sabine River Operations (Dow) to comply with test procedures specified in 30 TAC 319.11- 319.12. (flow meter cal)

Self Report? NO Classification: Minor

Citation:

M&RR, No. 2(a), Pg. 5 PERMIT

Description: Failure by Dow Chemical Company Sabine River Operations (Dow) to comply with test procedures for the analysis of pollutants specified in 30 Texas Administrative Code 319.11-319.12.

Self Report? NO Classification: Minor

Citation:

M&RR, No. 2(a), Pg. 5 PERMIT

Description: Failure by Dow Chemical Company Sabine River Operations (Dow) to comply with test procedures for the analysis of pollutants specified in 30 Texas Administrative Code 319.11-319.12.

25 Date: 07/31/2022 (1848430)

Self Report? YES Classification: Moderate

Citation:

2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)

Description: Failure to meet the limit for one or more permit parameter

26 Date: 08/08/2022 (1832729)

Self Report? YES Classification: Moderate

Citation:

30 TAC Chapter 111, SubChapter A 111.111(a)(4)(A)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 4C PERMIT
Special Terms and Conditions 15 OP

Description: Failure to prevent visible emission from the Ethylene Flare.

Self Report? YES Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 1 PERMIT
Special Terms and Conditions 15 OP

Description: Failure to maintain authorized ammonia (NH3) and Nitrogen Oxide (NOx) pounds per hour (lbs/hr) limits for EPN PK-12.

Self Report? YES Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 1 PERMIT
Special Condition 17B PERMIT
Special Terms and Conditions 15 OP

Description: Failure to maintain authorized NH3 and NOx emission rate limits for EPN PK-12.

Self Report? YES Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 1 PERMIT
Special Condition 17A PERMIT
Special Condition 17C PERMIT
Special Terms and Conditions 15 OP

Description: Failure to maintain the NOx emission rate limits for EPNs PK-1, PK-2, PK-4 and PK-14

Self Report? YES Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 1 PERMIT
Special Condition 17A PERMIT
Special Terms and Conditions 15 OP

Description: Failure to maintain the CO emission rate limit for EPN PK-11.

Self Report? YES Classification: Moderate

Citation:

30 TAC Chapter 115, SubChapter B 115.121(a)(2)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Terms and Conditions 13 OP

Description: Failure to prevent the carbon canisters volatile organic compound (VOC) limit from exceeding 50 parts per million (ppm).

Self Report? YES Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 9C(2) PERMIT
Special Terms and Conditions 15 OP

Description: Failure to conduct weekly cooling tower sampling for conductivity and total dissolved solids.

Self Report? YES Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 35 PERMIT
Special Terms and Conditions 15 OP

Description: Failure to use the Surge Tank Carbon Canister as a backup for the Ethylene Flare for a maximum of 30 days per year.

Self Report? YES Classification: Moderate

Citation:

30 TAC Chapter 115, SubChapter D 115.352(4)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP

Special Condition 10E PERMIT
Special Terms and Conditions 15 OP
Special Terms and Conditions 1A OP

Description: Failure to prevent an open-ended line.

Self Report? YES Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 11H PERMIT
Special Terms and Conditions 15 OP

Description: Failure to repair components on Delay of Repair.

Self Report? YES Classification: Moderate

Citation:

30 TAC Chapter 111, SubChapter A 111.111(a)(4)(A)(ii)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Terms and Conditions 1A OP

Description: Failure to conduct daily observation of the Ethylene Flare.

27 Date: 08/31/2022 (1832251)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Term and Condition 10 OP

Description: Failure to conduct quarterly visible emission observations.

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 115, SubChapter D 115.354(4)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Term and Condition 1(A) OP

Description: Failure to monitor number 6 recycle compressor suction relief valve within 24 hours of release.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 60, SubChapter C, PT 60, SubPT A 60.18(c)(2)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.11(b)(5)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 7(B) OP
Special Term and Condition 11 OP

Description: Failure to operate the CDG flare with a constant pilot.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 101, SubChapter F 101.201(b)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Term and Condition 2F OP

Description: Failure to create a final record for emissions events within two weeks after the end of the event.

28 Date: 08/31/2022 (1856228)

Self Report? YES Classification: Moderate

Citation:

2D TWC Chapter 26, SubChapter A 26.121(a)

30 TAC Chapter 305, SubChapter F 305.125(1)
Description: Failure to meet the limit for one or more permit parameter

29 Date: 09/30/2022 (1862585)

Self Report? YES Classification: Moderate

Citation:
2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)

Description: Failure to meet the limit for one or more permit parameter

30 Date: 11/18/2022 (1854161)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.146(1)(A)
30 TAC Chapter 122, SubChapter B 122.165(a)(8)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP

Description: Failure to certify Permit Compliance Certification and deviation report.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)(A)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP

Description: Failure to report all deviations.

31 Date: 11/30/2022 (1875348)

Self Report? YES Classification: Moderate

Citation:
2D TWC Chapter 26, SubChapter A 26.121(a)
30 TAC Chapter 305, SubChapter F 305.125(1)

Description: Failure to meet the limit for one or more permit parameter

32 Date: 12/09/2022 (1854088)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)(A)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP

Description: Failure to report all deviations.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 101, SubChapter F 101.201(b)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 2(F) OP

Description: Failure to submit final record of emission event within two weeks after the end of the emission event.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.146(1)(A)
30 TAC Chapter 122, SubChapter B 122.165(a)(8)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP

Description: Failure to include a signed certification of accuracy and completeness.

33 Date: 01/31/2023 (1867875)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 111, SubChapter A 111.111(a)(1)(A)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 5(A) PERMIT
Special Terms and Conditions PERMIT

Description: Failure to maintain opacity records.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions OP
Special Condition 5(C) PERMIT

Description: Failure to monitor equipment.

34 Date: 03/27/2023 (1873313)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 115, SubChapter D 115.352(1)(A)
30 TAC Chapter 115, SubChapter D 115.354(11)
30 TAC Chapter 115, SubChapter D 115.354(2)(C)
30 TAC Chapter 115, SubChapter D 115.354(9)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1025(b)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1027(b)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT YY 63.1103(e)(3)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT
Special Condition 11E PERMIT
Special Condition 11F PERMIT
Special Condition 15 PERMIT

Description: Failure to monitor components.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT
Special Condition 9.C.(2) PERMIT
Special Terms and Condition 15 PERMIT

Description: Failure to conduct Weekly Cooling tower sampling for conductivity and total dissolved solids.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT
Special Condition 17B PERMIT
Special Terms and Condition 15 PERMIT

Description: Failure to maintain authorized NOx lbs/hr, and lbs/mmBTU limits for EPN PK-12.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 15 PERMIT
Special Condition 27 PERMIT
Special Terms and Conditions PERMIT

Description: Failure to prevent IFR tank landing.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 101, SubChapter F 101.201(b)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 2F PERMIT

Description: Failure to record non-reportable incident within 14 days of the incident.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT
Special Condition 15 PERMIT
Special Terms and Conditions PERMIT

Description: Failure to operate Internal Floating Roof (IFR) under MAERT limit.

35 Date: 05/02/2023 (1888957)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 106, SubChapter S 106.433(8)(C)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 11 OP

Description: Failure to maintain surface coating records as required by 30 Texas Administrative Code (TAC) 106.433(8)(C), PBR registration 91404.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 106, SubChapter T 106.452(2)(C)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 11 OP

Description: Failure to maintain abrasive blasting records as required by PBR 106.452(2)(C), registration 71829.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 111, SubChapter A 111.111(a)(1)(A)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 3(A)(iv)(1) PERMIT

Description: Failure to maintain visible emissions records.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 122, SubChapter C 122.210(a)
5C THSC Chapter 382 382.085(b)

Description: Failure to codify PBRs into the Federal Operating Permit (FOP) 1899.

36 Date: 05/24/2023 (1896670)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 335, SubChapter C 335.53(f)
40 CFR Chapter 262, SubChapter I, PT 262, SubPT A 262.17(a)(1)(iv)(A)

Description: Failure to close a hazardous waste container when not in use.

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 335, SubChapter C 335.53(f)
40 CFR Chapter 262, SubChapter I, PT 262, SubPT A 262.17(a)(5)(i)

Description: Failure to label hazardous waste containers.

37 Date: 08/16/2023 (1911599)

Self Report? NO Classification: Moderate

Citation:
30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 60, SubChapter C, PT 60, SubPT A 60.18(c)(3)(ii)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT
Special Condition 7.A PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to maintain CDG flare BTU hourly average.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 115, SubChapter D 115.352(2)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT
Special Terms and Conditions 1.A PERMIT

Description: Failure to repair a leak within 15 days.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 101, SubChapter F 101.201(b)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT
Special Terms and Conditions 2.F PERMIT

Description: Failure to record non-reportable incident within 14 days of the incident.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 60, SubChapter C, PT 60, SubPT A 60.18(c)(2)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.11(b)(5)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT
Special Condition 7.B PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to maintain flare pilots lit.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 111, SubChapter A 111.111(a)(4)(A)(ii)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT
Special Terms and Conditions 1.A PERMIT

Description: Failure to complete daily flare observation logs.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 115, SubChapter D 115.354(4)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT
Special Condition 2 PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to monitor the relief valve within 24 hours of a release.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 60, SubChapter C, PT 60, SubPT A 60.18(c)(1)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.11(b)(4)
5C THSC Chapter 382 382.085(b)
Special Condition 7.C PERMIT

Description: Failure to operate CDG flare without visible emissions.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 117, SubChapter G 117.8140(b)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 1.A PERMIT

Description: Failure to perform quarterly engine emissions testing.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT
Special Condition 7 PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to ensure the Regenerative Thermal Oxidizer's (RTO) average temperature value was maintained.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 113, SubChapter C 113.1090
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT ZZZZ 63.6602
5C THSC Chapter 382 382.085(b)
Special Condition 4.C PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to maintain C2 compressor engine fuel flow above its minimum of 2623 scfh.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 115, SubChapter D 115.352(2)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions 1 PERMIT
Special Terms and Conditions 1.A PERMIT

Description: Failure to repair a leak within 5 days.

38* Date: 01/17/2024 (1950543)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 4.A PERMIT
Special Terms and Conditions 10 PERMIT

Description: Failure to maintain Barge Dock Thermal Abater temperature above 1784 degrees Fahrenheit.

39* Date: 01/17/2024 (1950337)

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 6 PERMIT

Description: Failure to maintain hourly nitrogen oxides (NOx) emissions below maximum allowable emission rate table (MAERT) limit.

40* Date: 01/29/2024 (1951076)

Self Report? NO Classification: Moderate

Citation:

2D TWC Chapter 26, SubChapter A 26.121(a)(1)
30 TAC Chapter 305, SubChapter F 305.125(1)
PC Pg. 8, No. 2(g) PERMIT

Description: Failure by Dow Sabine River Operations (Dow) to prevent Unauthorized Discharges (UDs) into or adjacent to the waters of the state at any location

not permitted as an outfall.

41* Date: 02/12/2024 (1950735)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 5(C) PERMIT
Special Terms and Conditions 5 PERMIT

Description: Failure to record equipment differential pressure readings.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 5(A) PERMIT
Special Terms and Conditions 5 PERMIT

Description: Failure to conduct visible emissions observations.

42* Date: 04/12/2024 (1973084)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 111, SubChapter A 111.111(a)(1)(B)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 3.A PERMIT

Description: Failure to prevent visible emissions.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 10 PERMIT

Description: Failure to complete degreaser inspections.

43* Date: 05/10/2024 (1974351)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)(C)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT

Description: Failure to submit a complete and accurate semi-annual deviation report (DR) within 30 days after the end of the reporting/certification period.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 115, SubChapter D 115.354(11)
30 TAC Chapter 115, SubChapter D 115.354(2)(C)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1025(b)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1027(b)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT YY 63.1103(e)
5C THSC Chapter 382 382.085(b)
Special Condition 11.E PERMIT
Special Condition 11.F PERMIT
Special Terms and Conditions 18 PERMIT
Special Terms and Conditions 1A PERMIT

Description: Failure to monitor components.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 115, SubChapter D 115.352(4)
30 TAC Chapter 122, SubChapter B 122.143(4)

40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1033(b)(1)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT YY 63.1103(e)(3)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions 18 PERMIT
Special Condition 11.E PERMIT

Description: Failure to cap open ended lines.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 9.C (2) PERMIT
Special Terms and Conditions 18 PERMIT

Description: Failure to conduct Weekly Cooling tower sampling for conductivity and total dissolved solids.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 117, SubChapter B 117.110(a)(2)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 17.A PERMIT
Special Terms and Conditions 18 PERMIT
Special Terms and Conditions 1A PERMIT

Description: Failure to maintain authorized Nitrogen Oxide (NOx) pounds per metric million British thermal units (lbs/mmbtu) limits for EPN PK-11.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT
Special Terms and Conditions 18 PERMIT

Description: Failure to maintain carbon monoxide (CO) limits for EPN PK-2.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT
Special Condition 17.B PERMIT
Special Terms and Conditions 18 PERMIT

Description: Failure to maintain authorized Nitrogen Oxide (NOx) pounds per hour (lbs/hr), and pounds per metric million British thermal units (lbs/mmbtu) limits for EPN PK-12.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT
Special Condition 17.B PERMIT
Special Terms and Conditions 18 PERMIT

Description: Failure to maintain carbon monoxide (CO) limits for EPN PK-12.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 101, SubChapter F 101.201(b)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 2.F PERMIT

Description: Failure to record non-reportable incident within 14 days of the incident.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 115, SubChapter B 115.121(a)(1)
30 TAC Chapter 115, SubChapter B 115.122(a)(2)(B)
30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 17 PERMIT
Special Terms and Conditions 18 PERMIT
Special Terms and Conditions 1A PERMIT

Description: Failure to maintain the carbon monoxide (CO) 50 parts per million limit.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 17. A PERMIT
Special Terms and Conditions 18 PERMIT

Description: Failure to maintain carbon monoxide (CO) lbs/mmbtu limits for EPN-PK-4.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT DDDDD 63.7515(a)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 1A PERMIT

Description: Failure to conduct the annual Boiler MACT test within the 13-month deadline.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Conditions 17.A PERMIT
Special Condition 1 PERMIT
Special Terms and Conditions 1A PERMIT

Description: Failure to maintain authorized Nitrogen Oxide (NOx) pounds per hour (lbs/hr), and pounds per metric million British thermal units (lbs/mmbtu) limits for EPN PK-2.

44* Date: 07/17/2024 (1982871)

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 7 PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to ensure the Regenerative Thermal Oxidizer's (RTO) average temperature value was maintained.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 101, SubChapter A 101.20(1)
30 TAC Chapter 101, SubChapter A 101.20(2)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 60, SubChapter C, PT 60, SubPT A 60.18(c)(3)(ii)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.11(b)(6)(ii)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2450(e)(2)
5C THSC Chapter 382 382.085(b)
Special Condition 5.A PERMIT
Special Condition 6.B PERMIT
Special Condition 7.A PERMIT
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to maintain CDG flare BTU hourly average.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 101, SubChapter A 101.20(1)
30 TAC Chapter 101, SubChapter A 101.20(2)
30 TAC Chapter 111, SubChapter A 111.111(a)(4)(A)
30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 60, SubChapter C, PT 60, SubPT A 60.18(c)(1)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT A 63.11(b)(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2450(e)(2)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT SS 63.982(b)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT SS 63.987(a)
5C THSC Chapter 382 382.085(b)
Special Condition 7.C PERMIT
Special Terms and Conditions 1.A PERMIT

Description: Failure to operate CDG flare without visible emissions.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 115, SubChapter D 115.352(2)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Condition 3.H PERMIT
Special Condition 3.I PERMIT
Special Condition 5.H PERMIT
Special Condition 5.I PERMIT
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to conduct follow-up monitoring.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 101, SubChapter F 101.201(b)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 2.F PERMIT

Description: Failure to record non-reportable incident within 14 days of the incident.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)
30 TAC Chapter 122, SubChapter B 122.146(5)(C)
30 TAC Chapter 122, SubChapter B 122.146(5)(D)
30 TAC Chapter 122, SubChapter B 122.165(b)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT

Description: Failure to submit an accurate deviation report.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 111, SubChapter A 111.111(a)(1)(A)
30 TAC Chapter 111, SubChapter A 111.111(a)(1)(B)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 3.A PERMIT

Description: Failure to prevent an opacity condition.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 101, SubChapter A 101.20(2)
30 TAC Chapter 115, SubChapter D 115.352(4)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2450(a)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2480(a)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT UU 63.1033(b)(1)
5C THSC Chapter 382 382.085(b)
Special Condition 3.E PERMIT
Special Condition 4.A PERMIT
Special Condition 4.B PERMIT
Special Condition 5 PERMIT
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to cap open ended lines.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 101, SubChapter A 101.20(2)

30 TAC Chapter 115, SubChapter D 115.356(2)(E)
30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2450(a)
40 CFR Chapter 63, SubChapter C, PT 63, SubPT FFFF 63.2480(a)
5C THSC Chapter 382 382.085(b)
Special Condition 3.J PERMIT
Special Condition 5.J PERMIT
Special Terms and Conditions 1.A PERMIT
Special Terms and Conditions 16 PERMIT

Description: Failure to maintain records.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.145(2)(A)
5C THSC Chapter 382 382.085(b)
General Terms and Conditions PERMIT

Description: Failure to report all deviations.

45* Date: 07/29/2024 (1989166)

Self Report? NO Classification: Minor

Citation:

30 TAC Chapter 101, SubChapter F 101.201(b)(1)(D)
30 TAC Chapter 101, SubChapter F 101.201(b)(1)(H)
5C THSC Chapter 382 382.085(b)

Description: Failure to submit an accurate final record associated with emissions event, TCEQ/STEERS Incident No. 422909.

Self Report? NO Classification: Moderate

Citation:

30 TAC Chapter 116, SubChapter B 116.115(c)
5C THSC Chapter 382 382.085(b)
Special Condition 1 PERMIT

Description: Failure to prevent unauthorized emissions to the atmosphere during an emissions event that was discovered on May 10, 2024, TCEQ/STEERS Incident No. 422909. {EIC B18(g)(13)}

* NOVs applicable for the Compliance History rating period 9/1/2019 to 8/31/2024

Appendix B
All Investigations Conducted During Component Period September 01, 2019 and August 31, 2024

Item 1*	September 12, 2019**	(1596543)
Item 2*	September 24, 2019**	(1606397)
Item 3*	September 25, 2019**	(1597057)
Item 4*	October 11, 2019**	(1613243)
Item 5	October 15, 2019**	(1598787)
Item 6	October 31, 2019**	(1596541)
Item 7*	November 04, 2019**	(1604885)
Item 8	November 14, 2019**	(1603335)
Item 9*	November 15, 2019**	(1619057)
Item 10	November 19, 2019**	(1605607)
Item 11	December 13, 2019**	(1626409)
Item 12*	December 19, 2019**	(1617426)
Item 13*	December 30, 2019**	(1606152)
Item 14	January 21, 2020**	(1634050)
Item 15	January 24, 2020**	(1616832)
Item 16	January 30, 2020**	(1622608)
Item 17	February 03, 2020**	(1622620)
Item 18	February 04, 2020**	(1624102)
Item 19*	February 10, 2020**	(1625458)
Item 20*	February 12, 2020**	(1625720)
Item 21*	February 20, 2020**	(1640669)
Item 22	February 26, 2020**	(1617053)
Item 23*	March 24, 2020**	(1647189)
Item 24	March 30, 2020**	(1631637)
Item 25*	April 10, 2020**	(1633580)
Item 26	April 16, 2020**	(1638214)
Item 27*	April 24, 2020**	(1653525)
Item 28*	April 28, 2020**	(1645395)
Item 29*	May 22, 2020**	(1660112)
Item 30*	June 10, 2020**	(1666616)
Item 31	June 11, 2020**	(1652478)
Item 32	June 19, 2020**	(1652075)
Item 33*	June 25, 2020**	(1651829)
Item 34*	June 29, 2020**	(1657425)
Item 35*	July 07, 2020**	(1658368)
Item 36*	July 20, 2020**	(1673573)
Item 37*	July 29, 2020**	(1664847)
Item 38*	August 04, 2020**	(1665903)
Item 39*	August 06, 2020**	(1666062)
Item 40*	August 07, 2020**	(1665817)
Item 41*	August 18, 2020**	(1680349)
Item 42*	September 18, 2020**	(1686917)
Item 43	October 09, 2020**	(1676790)
Item 44	October 21, 2020**	(1693264)

Item 45	October 22, 2020**	(1684477)
Item 46*	November 13, 2020**	(1712482)
Item 47*	November 19, 2020**	(1690507)
Item 48*	November 20, 2020**	(1690466)
Item 49	December 03, 2020**	(1677421)
Item 50*	December 10, 2020**	(1712483)
Item 51*	December 18, 2020**	(1678495)
Item 52*	January 11, 2021**	(1698919)
Item 53*	January 18, 2021**	(1712484)
Item 54	January 20, 2021**	(1692339)
Item 55*	February 22, 2021**	(1725537)
Item 56*	February 27, 2021**	(1702347)
Item 57	March 12, 2021**	(1697746)
Item 58*	April 14, 2021**	(1725539)
Item 59*	May 05, 2021**	(1702362)
Item 60*	May 14, 2021**	(1708035)
Item 61*	May 18, 2021**	(1740074)
Item 62*	June 10, 2021**	(1725056)
Item 63	June 14, 2021**	(1723048)
Item 64	June 18, 2021**	(1747584)
Item 65*	July 19, 2021**	(1751713)
Item 66	August 12, 2021**	(1705155)
Item 67	August 13, 2021**	(1751469)
Item 68	August 18, 2021**	(1736716)
Item 69	August 24, 2021**	(1756161)
Item 70*	August 26, 2021**	(1751073)
Item 71*	September 12, 2021**	(1766257)
Item 72*	October 11, 2021**	(1764992)
Item 73*	October 13, 2021**	(1763188)
Item 74*	October 18, 2021**	(1776720)
Item 75*	October 21, 2021**	(1764526)
Item 76	November 02, 2021**	(1764750)
Item 77*	November 09, 2021**	(1783629)
Item 78	November 18, 2021**	(1764172)
Item 79*	December 08, 2021**	(1790655)
Item 80*	January 20, 2022**	(1798449)
Item 81	February 01, 2022**	(1774743)
Item 82	February 16, 2022**	(1788539)
Item 83*	February 21, 2022**	(1806323)
Item 84*	March 17, 2022**	(1813390)
Item 85	March 23, 2022**	(1773210)
Item 86	March 25, 2022**	(1679505)
Item 87	April 22, 2022**	(1809937)
Item 88	May 06, 2022**	(1804065)
Item 89*	May 09, 2022**	(1810457)
Item 90*	May 23, 2022**	(1828800)
Item 91	June 01, 2022**	(1817580)

Item 92	June 24, 2022**	(1835092)
Item 93*	June 29, 2022**	(1825220)
Item 94	June 30, 2022**	(1823516)
Item 95	July 25, 2022**	(1842297)
Item 96	July 27, 2022**	(1832729)
Item 97	July 29, 2022**	(1818343)
Item 98	August 18, 2022**	(1848430)
Item 99	August 19, 2022**	(1832251)
Item 100*	August 22, 2022**	(1834387)
Item 101	September 16, 2022**	(1856228)
Item 102	October 17, 2022**	(1862585)
Item 103	October 31, 2022**	(1826396)
Item 104	November 09, 2022**	(1854161)
Item 105*	November 10, 2022**	(1853673)
Item 106*	November 22, 2022**	(1869499)
Item 107	December 02, 2022**	(1854088)
Item 108*	December 12, 2022**	(1862014)
Item 109	December 20, 2022**	(1875348)
Item 110*	January 02, 2023**	(1862065)
Item 111	January 06, 2023**	(1862338)
Item 112*	January 09, 2023**	(1865924)
Item 113	January 17, 2023**	(1867482)
Item 114*	January 19, 2023**	(1882169)
Item 115	January 24, 2023**	(1867875)
Item 116	January 27, 2023**	(1866879)
Item 117	February 06, 2023**	(1873061)
Item 118*	February 20, 2023**	(1889985)
Item 119	February 22, 2023**	(1867065)
Item 120	March 17, 2023**	(1873313)
Item 121*	March 29, 2023**	(1894572)
Item 122	April 11, 2023**	(1886463)
Item 123	April 25, 2023**	(1888957)
Item 124*	May 12, 2023**	(1879750)
Item 125	May 16, 2023**	(1896670)
Item 126*	May 17, 2023**	(1912516)
Item 127	June 02, 2023**	(1888393)
Item 128*	June 12, 2023**	(1919118)
Item 129	June 15, 2023**	(1902279)
Item 130	June 23, 2023**	(1903359)
Item 131*	June 28, 2023**	(1879749)
Item 132	June 30, 2023**	(1909737)
Item 133*	July 24, 2023**	(1926083)
Item 134	August 09, 2023**	(1911599)
Item 135*	August 17, 2023**	(1845890)
Item 136*	August 18, 2023**	(1933046)
Item 137	August 25, 2023**	(1918429)
Item 138*	September 25, 2023**	(1939182)

Item 139*	October 23, 2023**	(1929951)
Item 140*	October 24, 2023**	(1946033)
Item 141	November 15, 2023**	(1932265)
Item 142	November 21, 2023**	(1937358)
Item 143*	December 21, 2023**	(1961487)
Item 144*	January 03, 2024**	(1945249)
Item 145	January 17, 2024**	(1950337)
Item 146*	January 22, 2024**	(1968082)
Item 147	January 26, 2024**	(1951076)
Item 148	February 12, 2024**	(1950735)
Item 149*	February 23, 2024**	(1977146)
Item 150*	March 18, 2024**	(1983711)
Item 151*	March 19, 2024**	(1981776)
Item 152	April 02, 2024**	(1965304)
Item 153	April 03, 2024**	(1973738)
Item 154	April 08, 2024**	(1973084)
Item 155*	April 22, 2024**	(1990241)
Item 156	May 06, 2024**	(1974351)
Item 157*	May 20, 2024**	(1996698)
Item 158*	June 18, 2024**	(2003649)
Item 159	June 19, 2024**	(1988926)
Item 160	July 14, 2024**	(1982871)
Item 161*	July 17, 2024**	(2011202)
Item 162	July 29, 2024**	(1989166)
Item 163	August 16, 2024**	(1995832)
Item 164	August 26, 2024**	(1987543)

* No violations documented during this investigation

**Investigation applicable for the Compliance History Rating period between 09/01/2019 and 08/31/2024.