Preliminary Determination Summary

Chevron Phillips Chemical Company LP
Permit Numbers 2462C and N294

I. Applicant

Chevron Phillips Chemical Company LP
9500 Interstate 10 E
Baytown, TX 77521-8155

II. Project Location

Polyethylene Unit 1792
9500 Interstate 10 E
Harris County
Baytown, Texas 77521

III. Project Description

Chevron submitted an amendment to authorize changes to flare process monitoring and controls in order to optimize the addition of steam/air and supplemental natural gas, which will support continued maintenance of the required net heating value in the combustion zone. The project also proposes to add monitoring equipment associated with equipment leak fugitives to allow for the increase in supplemental fuel gas that may be combusted with the increase in total heating value. Maintenance, startup, and shutdown (MSS) emissions are authorized by this permit. No increases in emissions from maintenance, startup, and shutdown (MSS) activities are included in this project.

IV. Emissions

Air Contaminant	Proposed Allowable Emission Rates (tpy)
VOC	398.75
NO_x	27.38
SO_2	1.03
CO	133.15

V. Federal Applicability

The following chart illustrates the annual project emissions for each pollutant and whether this pollutant triggers PSD or Nonattainment (NA) review.

Pollutant	Project Emissions (tpy)	Major Mod Trigger (tpy)	NA Triggered Y/N	PSD Triggered Y/N
VOC	3.66	25 for NA 40 for PSD	N	N
NO_x	15.84	25 for NA 40 for PSD	Y*	N
SO_2	2.82	40	N	N

Pollutant	Project Emissions (tpy)	Major Mod Trigger (tpy)	NA Triggered Y/N	PSD Triggered Y/N
CO	82.26	100	N	N

The site is located in Harris County, which has been designated as a serious nonattainment area for ozone. The facility is an existing major source and the project will result in a significant net increase of NO_X. The project increase for the flare is the incremental increase of the emissions attributable to this project. The project increase for NOx exceeds the netting threshold of 5 tpy. The contemporaneous changes shown on the submitted Table 1F are greater than 25tpy for NOx and is based on the knowledge of past projects at the site which would demonstrate that the project will be unable to net out of nonattainment. Chevron has stipulated that nonattainment permitting does apply and plans to offset the project increases shown in the submitted Table 2F, submittal of contemporaneous netting is not necessary (per 30 TAC §116.12(20)(A), footnote (2)). NNSR review is applicable for NOx.

The facility is a named source. The site is located in an attainment area for at least one pollutant and is an existing major stationary source. The project emission increases are below the applicable significant significance threshold in 40 CFR § 52.21(b)(23)(i) for VOC, SO_2, and CO. PSD BACT and air quality analysis (AQA) requirements do not apply.

Pollutant	Project Increase (tpy) [1]	NA Netting Trigger (tpy)	PSD Netting Trigger (tpy)	Netting Required Y/N	Net Emission Change (tpy) [2]	Major Mod Trigger (tpy)	PSD Triggered Y/N	NA Triggered Y/N
VOC [3]	3.66	5	40	N	N/A	25	N	N
NOx [3, 4]	15.84	5	40	N*	15.84	25	N	Y*
SO_2 [4]	2.82	N/A	40	N	N/A	40	N	N
CO	82.26	N/A	100	N	N/A	100	N	N

Note: Nonattainment (NA) significance levels (trigger levels) should follow current Federal New Source Review (FNSR) guidance, and be based on the classification of the NA area in which the project is proposed.

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.

* Chevron has stipulated that nonattainment permitting does apply and plans to offset the project increases shown in the submitted Table 2F, submittal of contemporaneous netting is not necessary per 30 TAC §116.12(20)(A), footnote (2).

VI. Control Technology Review

A control technology review is required for all new and modified sources. The following controls required by the permits satisfy LAER for emissions of NO_X, based on a review of recently issued permits from Texas and other states, and consideration of RACT/BACT/LAER Clearinghouse (RBLC) data provided by the applicant.

Flare
The flare is designed to meet the requirements of 40 CFR Part 60.18 and to achieve a VOC compound destruction efficiency of 99% for compounds with up to three carbons, and 98% for compounds with four or more carbon atoms. The flare is equipped with a continuous flow monitor and composition analyzer.

Fugitives
Fugitive VOC emissions are monitored under the existing 28VHP LDAR Program.

VII. Air Quality Analysis

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

A. Minor Source NSR and Air Toxics Review

Table 1. Project-Related Modeling Results for State Property Line

Pollutant	Averaging Time	GLC_{max} ($\mu g/m^3$)	De Minimis ($\mu g/m^3$)
SO_2	1-hr	0.11	14.3

Table 2. Modeling Results for Minor NSR De Minimis

Pollutant	Averaging Time	GLC_{max} ($\mu g/m^3$)	De Minimis ($\mu g/m^3$)
SO_2	1-hr	0.11	7.8
SO_2	3-hr	0.10	25
NO_2	1-hr	1.21	7.5
NO_2	Annual	0.09	1
CO	1-hr	6.16	2,000
CO	8-hr	4.31	500

The GLC_{max} are the maximum predicted concentration associated with one year of meteorological data.

The justification for selecting the EPA's interim 1-hr NO_2 and 1-hr SO_2 De Minimis levels was based on the assumptions underlying EPA's development of the 1-hr NO_2 and 1-hr

SO_2 De Minimis levels. As explained in EPA guidance memoranda[1,2], the EPA believes it is reasonable as an interim approach to use a De Minimis level that represents 4% of the 1-hr NO_2 and 1-hr SO_2 NAAQS.

State Health Effects Review

The applicant provided a health effects analysis using the TCEQ Modeling and Effects Review Applicability (MERA) guidance document (APDG 5874) and SCREEN3 dispersion modeling software to evaluate potential off-site impacts. The constituents evaluated in include 1-butene, ethylene, n-butane, and n-pentane. All pollutants fall out at MERA step 3, as shown in the table below:

Table 3. Minor NSR Modeling Results for Health Effects

Pollutant	CAS Number	Averaging Time	ESL ($\mu g/m^3$)	10% ESL ($\mu g/m^3$)
1-butene	106-98-9	1-hr	19000	7.36
1-butene	106-98-9	Annual	1600	0.57
ethylene	74-85-1	1-hr	1400	7.36
ethylene	74-85-1	Annual	34	0.57
n-butane	106-97-8	1-hr	66000	7.36
n-pentane	109-66-0	1-hr	59000	7.36

VIII. Offsets

The site is located in Harris County, which has been designated as a serious nonattainment area for ozone. The Channelview Facility is an existing major source of VOC and NO_X, and the project will result in a significant net increase of NO_X.

When issued, the permit requires that the permit holder offset the project emission increase for facilities authorized by NSR Permit Nos. 1504A, 2462C, 37063, 19027, and 46305 prior to the commencement of operation, through participation in the TCEQ Emission Banking and Trading (EBT) Program in accordance with the rules in 30 TAC Chapter 101, Subchapter H.

The permit holder shall use 19.1 tpy of NO_X credits to offset the 15.84 tpy NO_X project emissions increase for the facilities authorized by this permit at a ratio of 1.2 to 1.0.

Prior to the commencement of operation, the permit holder is required to obtain approval from the TCEQ EBT Program for the credits being used and then submit a permit alteration or amendment request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify approved credits by TCEQ credit certificate number.

IX. Alternative Site Analysis and Compliance Certification

[1] www.epa.gov/sites/production/files/2015-07/documents/appwso2.pdf
[2] www.tceq.texas.gov/assets/public/permitting/air/memos/guidance_1hr_no2naaqs.pdf

The applicant has submitted the required demonstration relating to consideration of alternative sites and Clean Air Act compliance status for sites owned or operated by the applicant (or by any entity controlling, controlled by, or under common control with the applicant). The analysis demonstrated that the benefits of the proposed location and source configuration significantly outweigh the environmental and social costs of that location.

X. 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.

Special Conditions

Permit Numbers 2462C and N294

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit. The annual rates are based on any consecutive 12-month period unless otherwise noted.

2. Upon the startup of the modified facilities and expanded operation as described in Special Condition. No. 3, non-fugitive atmospheric emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions, with exception of rupture discs and relief valves listed in Attachment B to this permit.

3. This permit authorizes modification and expansion of PEU-1792 as described within the permit amendment application, PI-1 dated July 1, 2015 (TCEQ Project No. 238272) and subsequent updates, and the as-built amendment application, PI-1 dated March 31, 2020 (TCEQ Project No. 314315) and subsequent updates. The construction of the project may occur in phases. Each production line constructed to replace an existing production line(s) is a phase. Accordingly, the use of the term "expanded operations" in this permit refers to the phase of the project that has been completed. Commencement of expanded operations is considered to be when an individual line within the unit is modified and placed into service. Within 12 months after completion of construction and commencement of all expanded line operations, the holder of this permit shall submit a permit action to remove or modify Special Conditions and MAERT limits that are applicable only to the pre-expansion configuration through the appropriate permitting mechanism. The action shall provide an explanation for each proposed change. **(08/2020)**

   Expanded operations at any individual line may not commence until the storage silos designated for control and associated with that line are routed to the Regenerative Thermal Oxidizer (RTO) as required in Special Condition No. 13.

Federal Applicability

4. Upon the startup of the modified facilities and expanded operation as described in Special Condition No. 3, these facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):

   A. Subpart A, General Provisions.

   B. Subpart DDD, Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry.

5. Upon the startup of the modified facilities and expanded operation as described in Special Condition No. 3, these facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63: **(08/2020)**

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A. Subpart A, General Provisions.

B. Subpart FFFF, National Emission Standard for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

C. Subpart ZZZZ, National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

D. Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters.

Production

6. Fuel gas combusted at this facility shall be sweet natural gas containing no more than 5 grains of total sulfur per 100 dry standard cubic feet.

7. Prior to the startup of the modified facilities and expanded operation as described in Special Condition No. 3, the total polyethylene production for Train Nos. 1, 2, 3, 4, 5, and 6 shall not exceed 650 million pounds per year, based on a rolling 12-month period. Hourly production for Train Nos. 1-6 shall not exceed 85,000 pounds.

   The ethylene emissions to the atmosphere from the polyethylene pellets, after the extruder and before final loading for Train Nos. 1-6 shall not exceed 78.3 tpy from Emission Point No. (EPN) F-04. The net emissions attributed to Train Nos. 1-6 shall be calculated using the beverage can method or headspace analysis minus the proportion of emissions from Train Nos. 1-6 that are destroyed by control devices.

8. Upon the startup of the modified facilities and commencement of expanded operation as described in Special Condition No. 3, the facility will produce polymers at a rate not to exceed the hourly throughput constraints contained in the Table 2 submitted with the permit amendment application, PI-1 dated July 1, 2015 (TCEQ Project No. 238272) and subsequent updates, and the as-built amendment application, PI-1 dated March 31, 2020 (TCEQ Project No. 314315) and subsequent updates. Production records shall be updated monthly with the pounds of polymer produced during the previous month and rolling 12-months to date. **(08/2020)**

   Total VOC emitted to the atmosphere after the extruder through product loadout includes the Pellet Cap (EPN PELLET), RTO (EPN ROX-1), RTO downtime (EPN ROX-DT), shall not exceed 155.3 pounds of VOC/million (MM) pounds of low density polyethylene pellets on a rolling 12-month basis. **(08/2020)**

   Ongoing compliance with VOC emission limits for the polyethylene pellet handling systems between each extruder and product loadout (inclusive) will be determined monthly based on a summation of Paragraphs A and B of this condition.

   A. Calculated emissions based on stack test results for EPN 1792-35, 1792-36, 1792-37, 1792-38, 1792-39, and 1792-40 plus calculated VOC emissions from EPNs ROX-1 and ROX-DT. **(08/2020)**

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B. Polymer handling pellet fugitive emission losses (EPN F-04) shall be calculated by average head space concentration multiplied by monthly production. VOC sampling for polymer handling pellet fugitive losses (F-04) testing shall occur immediately after the last controlled storage silo. The VOC head space test method shall be capable of determining the total residual concentrations of VOC species having 12 or fewer carbon atoms. The permit holder shall submit a proposed test method for approval to the Executive Director or to the Air Section Manager for the Regional Office within 180 days of issuance of the permit amendment application, PI-1 dated July 1, 2015 and as updated (TCEQ Project No. 238272). Upon approval, a copy of the approved test method shall be retained at the plant site and attached to a copy of the permit. Monthly average sampling will be based on one sample per line per month.

C. Polymer production rates and monitoring records will be maintained at the plant site and shall include (but are not limited to):

(1) Day and time of sample.

(2) Actual plant production rate at the time of sampling and monthly production rate.

(3) Product number.

Flare (EPN 45)

9. The flare X-901 (EPN 45) shall be designed and operated in accordance with the following requirements:

A. The flare system shall be designed such that the combined assist natural gas and waste stream to the flare meets the Title 40 Code of Federal Regulations § 60.18 (40 CFR § 60.18) specifications of minimum heating value and maximum tip velocity at all times when emissions may be vented to it.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate Texas Commission on Environmental Quality (TCEQ) Regional Office to demonstrate compliance with these requirements.

B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame 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. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the use of steam assist to the flare.

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D. Upon the startup of the modified facilities and first production line with expanded operation as described in Special Condition No. 3, the permit holder shall install a continuous flow monitor and composition analyzer system that provide a record of the vent stream flow and composition to the flare. The flow monitoring system shall be capable of measuring the entire gas stream flow to the flare (i.e., all vent gas and supplemental fuel sources) and may consist of one or more flow measurements at one or more header locations. The heating value monitoring system shall be capable of determining the flow-weighted heating value for the entire gas stream to the flare (i.e., all vent gas and supplemental fuel sources) and may consist of one or more sampling locations at one or more header locations. Grab samples taken at least annual or a reference heating value may be used for purchased natural gas in lieu of direct measurement. The flow monitor sensor(s) and analyzer(s) sample point(s) shall be installed in the vent stream(s) as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition (or Btu content) shall be recorded each hour. **(TBD)**

The monitors shall be calibrated or have a calibration check performed on an annual basis to meet the accuracy specifications in 30 TAC § 115.725(d)(1).

Calibration of the analyzer for the HRVOC constituents and the other constituents currently monitored to determine net heating value and molecular weight pursuant to 30 TAC § 115.725(d)(2) shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR §60.18(f)(3) as amended through October 17, 2000 (65 FR 61744).

The monitors and analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a calendar year as specified in 30 TAC 115.725(d)(3). Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR §§60.18(f)(3) and 60.18(f)(4) shall be recorded at least once every hour. Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors within the permit amendment application, PI-1 dated July 1, 2015 and as updated (TCEQ Project No. 238272) or TCEQ Guidance Document factors as appropriate for flare X-901 (EPN 45).

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E. The flare (EPN 45) shall operate in accordance with 40 CFR 63 Subpart FFFF "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing". Compliance with the requirements of this paragraph shall begin no later than August 12, 2023. Prior to the compliance requirements and schedule of this paragraph, Special Condition Nos. **9**.A through D shall apply. After the compliance requirements and schedule of this paragraph are met, Special Condition Nos. **9**.E and 9.F shall apply.
(TBD)

F. The following requirements apply to capture systems for flare X-901,either:

(1) 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

(2) Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

(3) The capture system shall not have a bypass, or if there is a bypass for the capture system, comply with either of the following requirements:

i. Install a flow indicator that records and verifies zero 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

ii. Once a month, inspect the valves, verifying 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.

(4) Records of the inspections required shall be maintained and if the results of any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

Catalytic Oxidizer (EPN 1792-4B)

10. The Catalytic Oxidizer (EPN 1792-4B) shall have no visible emissions.

11. A continuous emissions monitoring system (CEMS) shall be installed and operated to monitor and record emissions of volatile organic compounds (VOC) in the exhaust stack of the Catalytic Oxidizer (EPN 1792-4B).

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Quality assured (or valid) data must be generated when the oxidizer is operating except during 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 oxidizer operated over the previous rolling 12-month period.

12. Prior to expanded operations as described in Special Condition No. 3, during normal operation, all highly reactive (HRVOC) and/or other organic compound waste gas from existing Storage Bins (V-379, V-380, V-381, and V-382) and from four of the six Blend Silos (M-305, M-306, M-307, and M-308) shall be routed to the Catalytic Oxidizer (EPN 1792-4B).

    The Catalytic Oxidizer (EPN 1792-4B) shall be operated with no less than 95.0 percent efficiency in disposing of the HRVOC from the storage bins. Vent gases from these storage bins shall be routed to a catalytic oxidizer during normal operation. Planned start-up, shutdown, and maintenance operations and emissions are not authorized by this special condition.

Regenerative Thermal Oxidizer (RTO, EPN ROX-1)

13. Upon startup of any modified facilities and expanded operations as described in Special Condition No. 3, the associated vent streams from the controlled storage silos shall be routed to the RTO (EPN ROX-1) which shall maintain the VOC concentration in the exhaust gas less than 10 ppmv on a dry basis, or achieve a VOC destruction efficiency no less than 99 percent. **(08/2020)**

    Emissions to the atmosphere may occur during periods of RTO downtime (EPN ROX-DT) when the firebox exit temperature in Special Condition 14 is not met. The period during which the emissions from EPN ROX-DT shall occur shall not exceed 100 hours on a rolling 12-month basis. Records shall be maintained for at least five years documenting ROX-DT emissions and duration of each occurrence. **(08/2020)**

14. The RTO firebox exit temperature shall be maintained at not less than 1400°F on a six-minute average while waste gas is being fed into the oxidizer prior to initial stack testing. After the initial stack test has been completed, the six minute average temperature shall be equal to, or greater than the respective hourly average (established as the average hourly temperature based on all valid sample runs) maintained during the most recent satisfactory stack testing required by Special Condition No. 17.

    Records shall be maintained for at least five years documenting RTO start-up, shutdown, and duration of each occurrence.

15. The RTO firebox exit temperature shall be continuously monitored and recorded when waste gas is directed to the RTO. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. 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 ±2.5ºC.

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Quality assured (or valid) data must be generated when the RTO is operating as required by Special Condition No. 13 except during calibration. 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 Regenerative Thermal oxidizer operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. **(08/2020)**

After expanded operations, this permit authorizes uncontrolled emissions from EPN ROX-DT (as listed in Attachment A to this permit) due to maintenance of the RTO when production is occurring. Miscellaneous maintenance of the RTO during production shall not exceed 100 hours per year on a rolling 12-month basis (as listed in Attachment A to this permit). Uncontrolled VOC emissions to the atmosphere from EPN ROX-DT due to maintenance of the RTO shall be limited to 85.0 lbs per hour. Emission rates shall be determined using production data and the appropriate emission factors based on the permit amendment application, PI-1 dated March 31, 2020 (TCEQ Project No. 314315) and subsequent updates. Records shall be maintained for at least five years documenting RTO (EPN ROX-DT) emissions and duration of each occurrence. **(08/2020)**

16. The following requirements apply to the capture systems for the RTO.

A. 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

B. Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

C. The bypass for the control device shall comply with either of the following requirements:

(1) Install a flow indicator that records and verifies zero 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

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

D. Records of the inspections required shall be maintained and if the results of any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

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RTO Initial Determination of Compliance

17. 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 the RTO (EPN ROX-1) 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.

    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 shall be notified not less than 45 days prior to sampling. 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 from maximum operating rates 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 the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

    B. Air contaminants emitted from the RTO (EPN ROX-1) to be tested for include VOC, CO, and NO_x. Additional contaminants to test for may be requested by the appropriate TCEQ Regional Office.

    C. Sampling shall occur within 60 days after achieving the maximum operating rate after expanded operation, but no later than 180 days after initial start-up of the facilities (or increase in production, as appropriate) for each completed phase of the project and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.

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D. The facility being sampled shall operate at the maximum achievable operating rate with the regenerative thermal oxidizer temperature recorded during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, the permit holder may operate at a short-term operating rate greater than the rate recorded during the last successful test period provided the new rate does not exceed 105% of the maximum achievable operating rate recorded during the test. The permit holder may operate at this operating rate without additional stack test unless otherwise required by the Executive Director.

During subsequent operations, if the maximum production rates are greater than 105% of that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region. **(08/2020)**

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 EPN ROX-1 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.

Dryer Stack Testing

18. After all expanded operations as defined in Special Condition No. 3, the permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of VOC being emitted into the atmosphere from the Pellet Dryers (EPNs 1792-35, 1792-36, 1792-37, 1792-38, 1792-39, and 1792-40) 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 TCEQ Sampling Procedures Manual and the U.S. EPA Reference Methods. **(08/2020)**

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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 40 CFR Part 60 testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. 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 from maximum operating rates 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 the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

B. Air contaminants emitted from the Pellet Dryers to be tested for include ethylene, propylene, and total VOC. Additional contaminants to test for may be requested by the appropriate TCEQ Regional Office.

C. Sampling shall occur within 60 days after achieving the maximum operating rate of expanded operations, but no later than 180 days after initial start-up of the facilities (or increase in production, as appropriate) for each completed phase of the project and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.

D. The facility being sampled shall operate at maximum operating rate of polyethylene drying during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

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During subsequent operations, the permit holder may operate at a short-term operating rate greater than the rate recorded during the last successful test period provided the new rate does not exceed 105% of the maximum operating rate recorded during the test. The permit holder may operate at this operating rate without additional stack test unless otherwise required by the Executive Director.

During subsequent operations, if the maximum production rates are greater than 105% of that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region. **(08/2020)**

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 shall be incorporated into the design of the Pellet Dryers constructed after calendar year 2017 according to the specifications set forth in the attachment entitled "Chapter 2, Guidelines For Stack Sampling Facilities" of the TCEQ Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.

VOC Storage and Loading

19. Tanks FIN TK-902 (EPN 03), TK-402 (EPN 28), TK-401 (EPN 29) V-912 (EPN 1792-11), Tank TK-903 (EPN 1792-47) service is limited to storing VOC with a vapor pressure less than 0.5 psia. **(08/2020)**

20. After commencement of expanded operation as described in Special Condition No. 3, tanks are subject to the following requirements:

A. 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 or utilize bottom fill.

B. 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, 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.

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Emissions from tanks shall be calculated using the AP-42 methods that were used to determine the MAERT limits in the permit amendment application, PI-1 July 1, 2015. Sample calculations from the application shall either be attached to a copy of this permit at the plant site or maintained and available upon request.

21. Diesel Fuel tanks V-905 (EPN 1792-42) and V-930 (EPN 1792-44) shall be exempt from Special Condition No. 20.A.

22. The permit holder shall not allow visible emissions resulting from loading or unloading of the Storage Tanks identified as EPNs 28, 29, 1792-11, F-05, 1792-44, 1792-45, and 1792-48.

23. Visible emissions, except uncombined water, to the atmosphere shall not exceed 5.0 percent opacity in any five-minute period from any point or fugitive source associated with the Storage Tanks identified as EPNs 30 and 3.

24. After commencement of expanded operations of the first production line as described in Special Condition No. 3, the permit holder shall maintain and update a monthly emissions record which includes calculated emissions of VOC from all liquid 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.”

25. After commencement of expanded operations of the first production line as described in Special Condition No. 3, all liquid loading lines and connectors shall be visually inspected for any defects prior to hookup. Lines and connectors that are visibly damaged shall be removed from service. Operations shall cease immediately upon detection of any liquid leaking from the lines or connections.

26. Slop Oil Loading at EPN LL03 shall be submerged fill or utilize bottom fill and rolling 12 month rack throughput records shall be updated on a monthly basis for each product loaded.

Baghouse/Filters

27. Particulate matter emissions shall not exceed 0.01 grain per dry standard cubic foot (dscf) of air from any vent. There shall be no visible emissions exceeding 30 seconds in any six-minute period as determined using U. S. EPA Test Method 22. **(08/2020)**

    The vents covered by this permit shall not operate unless control devices and associated equipment are maintained in good working order and operating. All vents will be inspected for visible emissions once per day and a spare-parts filter inventory will be maintained on site. Records shall be maintained of all inspections and maintenance performed.

Engine (EPN 1792-43)

28. The permit holder shall maintain a record to demonstrate that routine operation of the engine associated with EPN 1792-43 does not exceed 82 hours per year, on a rolling 12-month basis.

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Cooling Tower (EPN 1792-76)

29. The cooling towers (EPN 1792-76) shall be operated and monitored in accordance with the following: **(08/2020)**

A. The VOC associated with cooling towers (EPN 1792-76) water shall be monitored weekly with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. The results of the monitoring, cooling water flow rate and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12-month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12 month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the 2 VOC monitored results.

B. In lieu of Paragraph A, a continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw may be installed. The sampling system for the continuous on-line monitoring system must be demonstrated equivalent to the air-stripping apparatus used in Appendix P for determining strippable HRVOC concentrations in the water as specified in 30 TAC § 115.764(f). The continuous on-line monitor system must satisfy the requirements of Sections 8.3, 10, 13.1, and 13.2 of 40 Code of Federal Regulations (CFR) Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744). The multi-point calibration procedure in Section 10.1 of Performance Specification 9 must be performed at least once every calendar quarter instead of once every month. The online monitoring system must be operated as required at least 95% of the time when the cooling tower is operational, averaged over a rolling 12-month period. During out-of-order periods of the on-line HRVOC monitor(s) of 24 hours or greater, sampling must be performed for total and speciated HRVOC analysis according to the air-stripping method in Appendix P. Sampling must be performed at least three times per calendar week, with an interval of no less than 36 hours between sampling times, until the continuous on-line monitor is properly operating and within the required performance specifications.

C. The cooling tower shall be equipped with drift eliminators having manufacturer's design assurance of 0.0005% drift or less. Drifts eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs. **(08/2020)**

D. Total dissolved solids (TDS) shall not exceed 3,500 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. **(08/2020)**

E. The cooling water (EPN 1792-76) shall be sampled at least once per week for TDS. **(08/2020)**

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

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

(3) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained. If testing is done by an outside lab, instrument calibration records are not required.

G. Emission rates of PM, PM_{10} and $PM_{2.5}$ shall be calculated using the measured TDS, 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.

Fugitives

30. Piping, Valves, Connectors, Flanges, Pumps and Compressors in VOC Service – 28RCT

Prior to expanded operations, the following requirements apply to the facilities that are in the scope of this permit.

A. These conditions shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure equal to or 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 to be made available upon request.

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.

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. Non-accessible 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.

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E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled quarterly monitoring after initial installation or replacement, all new or reworked connections shall be gas-tested or hydraulically-tested at no less than normal operating pressure and adjustments 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 a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed.

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.

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.

An approved gas analyzer shall conform to requirements listed in 40 CFR § 60.485(a) - (b).

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 and compressor 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 connectors 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 and compressor seals found to be emitting VOC in excess of 10,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired.

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I. Every reasonable effort shall be made to repair a leaking component, as specified in this paragraph, within 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. At the discretion of the TCEQ Executive Director or designated representative, early unit shutdown or other appropriate action may be required based on the number and severity of tagged leaks awaiting shutdown.

J. The results of the required fugitive instrument monitoring and maintenance program shall be made available to the TCEQ Executive Director or designated representative upon request. Records shall indicate appropriate dates, test methods, instrument readings, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of physical inspections are not required unless a leak is detected.

K. Fugitive emission monitoring required by 30 TAC Chapter 115 may be used in lieu of Items F through I of this condition.

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

31. Piping, Valves, Connectors, Pumps, Agitators, and Compressors in VOC Service - 28VHP

After commencement of expanded operations of the first production line as described in Special Condition No. 3, 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 Volatile Organic Compound (VOC) has an aggregate partial pressure or vapor pressure of less than 0.044 pounds 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.

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.

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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. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph 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 within the 72-hour 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.

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F. Within six months following expanded operations of the first production line, 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 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.

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

G. Within six months following expanded operations of the first production line, 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 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 connectors 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.

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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 - 115.359 or 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.

Connectors in VOC Service Inspected Quarterly - (28CNTQ)

32. The following requirements also apply to the facilities that are in the scope of this permit.

A. In addition to the weekly physical inspection required by Item E of Special Condition Nos. 30 and 31, all accessible connectors in gas/vapor and light liquid service shall be monitored quarterly with an approved gas analyzer in accordance with Items F through J of Special Condition Nos. 30 and 31.

B. Allowance for reduced monitoring frequencies.

(1) The frequency of monitoring may be reduced from quarterly to semiannually if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

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(2) The frequency of monitoring may be reduced from semiannually to annually if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

C. If the percent of connectors 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.

D. The percent of connectors leaking used in paragraph B shall be determined using the following formula:

$$(Cl + Cs) \times 100/Ct = Cp$$

Where:

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

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

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

Cp = the percentage of leaking connectors for the monitoring period.

Planned Maintenance, Startup, and Shutdown (MSS)

33. Prior to expanded operations, this permit authorizes maintenance emissions from EPN 1792-4M when production is occurring. Maintenance activities during production shall not exceed 480 hours per year on a rolling 12-month basis. Polyethylene production shall not exceed 85,000 lbs in any 60-minute period during maintenance operations. The 480 hours of maintenance, startup, and shutdown activities related to EPN 1792-4M are shown in Attachment A to this permit.

34. This permit authorizes emissions from the Flare X-901 (EPN 45) for the following maintenance, start-up, and shutdown activities from polyethylene lines one through six and the purification process for reactor purges, compressor purges, high pressure pump purges, hopper venting, and pump venting from polyethylene lines one through six and purification process. Emissions are limited to the hourly and annual limits in the attached table entitled “Emission Sources - Maximum Allowable Emission Rates.”

These emissions are subject to the maximum allowable emission rates indicated on the MAERT. Any start-up, shutdown, and maintenance activities not in the above list are not authorized by this permit. The permit holder shall maintain a record to demonstrate that start-up, shutdown, and maintenance operations associated with each EPN demonstrate compliance. These records shall be kept at the plant demonstrating compliance with this representation for the last five years.

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Testing

35. Prior to expanded operations of a production line the pellet fugitives shall be tested quarterly using the beverage can test or headspace analysis after the pellets exit the dryer.

Recordkeeping

36. The records required by this special condition 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. These records shall be made immediately available at the request of personnel from the TCEQ or any air pollution control agency with jurisdiction.

    A. The hourly and annual production from Train Nos. 1-6 as required in Special Condition Nos. 7 and 8.

    B. The monthly or quarterly beverage can test results or headspace analysis test results and the calculations demonstrating the emissions from Train Nos. 1-6 polyethylene pellets as required in Special Condition Nos. 8 and 35.

    C. The analysis results from the cooling tower tests and the identified heat exchanger leaks as required by Special Condition No. 29.

    D. Records to demonstrate compliance with fugitive Special Condition Nos. 30, 31 and 32.

    E. The flare pilot records as required in Special Condition No. 9.

    F. CEMS records as required in Special Condition No. 11.

    G. Temperature records as required in Special Condition No. 15.

    H. Engine records to demonstrate compliance with Special Condition No. 28. **(08/2020)**

Offsets – 2020 Flare Amendment (TCEQ Project No. 315800)

37. This Nonattainment (NNSR) permit is issued/approved based on the requirement that the permit holder offset the project emission increase for facilities authorized by NSR Permit Nos. 1504A, 2462C, 37063, 19027, and 46305 prior to the commencement of operation, through participation in the TCEQ Emission Banking and Trading (EBT) Program in accordance with the rules in 30 TAC Chapter 101, Subchapter H. **(TBD)**

    A. The permit holder shall use 19.1 tpy of NOx credits to offset the 15.84 tpy NOx project emission increase for the facilities authorized by this permit at a ratio of 1.2 to 1.0

    B. Prior to the commencement of operation, the permit holder shall obtain approval from the TCEQ EBT Program for the credits being used and then submit a permit alteration or amendment request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify approved credits by TCEQ credit certificate number.

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Permits by Rule (PBRs)

38. The following sources and/or activities are authorized under a PBR. This list is not intended to be all-inclusive and can be altered without modifications to this permit.

Authorization	Source or Activity
Unregistered PBR under Standard Exemption 106, as issued on March 14, 1997.	Particulate Matter from the Baghouses Emission Point Numbers (EPNs) 1792-24 and 1792-25, Facility Identification Numbers (FINs) F-190, F-191, and F-192.

Date: TBD

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ATTACHMENT A

Permit Number 2462C and N294

Maintenance Activities Authorized for a Rolling 12-Month Period

Maintenance Descriptions

Maintenance and testing for analyzers and related equipment

Maintenance for blowers and related equipment

Maintenance for feeders and related equipment

Maintenance for filters and related equipment

Maintenance for filter guards and related equipment

Maintenance for fuel gas PSV and related equipment

Filter fluff removal

Catalyst replacement

Heat exchanger inspection

Miscellaneous maintenance for systems and equipment routed to EPN 1792-4B (H-3030 Catalytic Oxidizer) - Before Expansion

Miscellaneous maintenance on H-3030 Catalytic Oxidizer not to exceed 480 hrs/yr (EPN 1792-4M) – Before Expansion

Miscellaneous maintenance for systems and equipment routed to EPN ROX-1 and maintenance on EPN ROX-1 (Regenerative Thermal Oxidizer) identified as ROX-DT not to exceed 100 hrs/yr – After Expansion

Date: August 20, 2020

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ATTACHMENT B

Permit Number 2462C and N294

Atmospheric Safety Devices with Potential for >1% VOC Gases

Excepted Relief Device per Special Condition 2					
PSE-101	PSE-125	PSV-150	PSE-358B	PSE-1507	PSV-1631
PSE-102	PSE-126	PSE-175	PSV-440	PSE-1508	PSE (F-3031)
PSE-103	PSE-127	PSV-351	PSV-441	PSE-1510	PSE-3031A
PSE-104	PSE-128	PSE-351A	PSV-442	PSE-1511	PSE-3031B
PSE-105	PSE-129	PSE-351B	PSV-443	PSE-1512	PSV-3464
PSE-106	PSE-130	PSV-352	PSV-904	PSE-1523A	PSE-3464A
PSE-107	PSE-131	PSE-352A	PSV-911	PSE-1523B	PSE-3464B
PSE-108	PSE-132	PSE-352B	PSV-912	PSV-1531	PSV-3465
PSE-109	PSE-133	PSV-353	PSV-929	PSE-1560	PSE-3465A
PSV-109B	PSE-134	PSE-353A	PSV-1001	PSE-1561	PSE-3465B
PSE-110	PSE-135	PSE-353B	PSV-1002	PSE-1562	PSV-3466
PSE-111	PSE-136	PSV-354	PSV-1003	PSE-1601	PSE-3466A
PSV-111	PSE-137	PSE-354A	PSV-1004	PSE-1602	PSE-3466B
PSE-112	PSE-138	PSE-354B	PSE-1105	PSE-1603	PSV-3467
PSE-113	PSE-139	PSV-355	PSE-1106	PSE-1604	PSE-3467A
PSE-114	PSE-140	PSE-355A	PSE-1107	PSE-1605	PSE-3467B
PSE-115	PSE-141	PSE-355B	PSE-1108	PSE-1606	PSV-4732
PSE-116	PSE-142	PSV-356	PSE-1170	PSE-1607	PSV-4712
PSE-117	PSE-143	PSE-356A	PSE-1177	PSE-1608	PSE-10190
PSE-118	PSE-144	PSE-356B	PSE-1501	PSE-1610	PSE-10191
PSE-119	PSE-145	PSV-357	PSE-1502	PSE-1611	PSE-10192
PSE-120	PSE-146	PSE-357A	PSE-1503	PSE-1612	PSE-11019
PSE-121	PSE-147	PSE-357B	PSE-1504	PSE-1624	PSE-12019
PSE-122	PSE-148	PSV-358	PSE-1505	PSE-1625	PSE-13019
PSE-123	PSE-149	PSE-358A	PSE-1506	PSE-1626	PSE-14019
PSE-124	PSE-150	PSE-0014			

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The following list of excepted relief devices were installed prior to expanded operation as described in Special Condition No. 3; TCEQ Air Permit Division review shall apply to move the device to the previous exemption list if the relief device is modified.

Excepted Relief Device per Special Condition 2					
PSV-117	PSE-165	PSV-191B	PSV-1068	PSV-1539B	PSV-4686B
PSV-136A	PSE (V-166)	PSV-428A	PSV-1504	PSE-1557	PSV-4687A
PSV-159A	PSE-166	PSV-428B	PSV-1508A	PSV-1557	PSV-4687B
PSV-159B	PSE-169A	PSV-444	PSV-1508B	PSE-1558	PSV-4691A
PSV-160A	PSE-169B	PSV-801	PSV-1509A	PSE-1559	PSV-4691B
PSV-160B	PSV-173	PSV-803	PSV-1509B	PSV-1604	PSV-4742
PSV-161A	PSV-174	PSV-903A	PSV-1510	PSV-1608A	PSV-7110
PSV-161B	PSE-186	PSV-903B	PSE-1517A	PSV-1608B	PSE-10127
PSV-162	PSV-187	PSV-907	PSE-1517B	PSV-1609A	PSE-10132
PSE (V-163)	PSE-190	PSV-931A	PSE-1522	PSV-1609B	PSV-10139
PSE-163	PSV-190A	PSV-931B	PSV-1538A	PSV-1610	PSV-10140
PSE (V-164)	PSV-190B	PSV-1007	PSV-1538B	PSE-1622	PSE-15101
PSE-164	PSV-191A	PSV-1067	PSV-1539A	PSV-4686A	PSE-16101
PSE (V-165)					

Date: August 20, 2020

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Emission Sources - Maximum Allowable Emission Rates Before Production Expansion (7)

Permit Number 2462C and N294

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)
F-75 (5)	Process Fugitives	VOC	13.50	59.12
F-04 (5)	Pellet Losses	VOC	52.30	78.30
F-05	Catalyst Mix and Holding Tanks	VOC	1.89	0.20
1592-42	Holding Pond	VOC	0.01	0.01
25	F-355 Bagfilter	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-4C	F-376 Baghouse	PM	0.02	0.05
		PM_{10}	0.02	0.05
		$PM_{2.5}$	0.02	0.05
1792-4F	F-365 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-4G	F-366 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-4H	F-367 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-4J	F-356 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-15	F-394 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02

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Emission Sources - Maximum Allowable Emission Rates Before Production Expansion

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
1792-16	F-395 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-17	F-396 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-18	F-397 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-21	F-312 Bagfilter	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-22	F-315 Bagfilter	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-23	F-320 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
26	H-602 Hot Oil Heater	CO	1.80	6.50
		NO_X	1.32	2.87
		PM	0.16	0.59
		PM_{10}	0.16	0.59
		$PM_{2.5}$	0.16	0.59
		SO_2	0.01	0.05
		VOC	0.12	0.43
45	X-901 Flare - Normal Operation and MSS combined	CO	80.59	53.41
		NO_X	15.69	9.33
		SO_2	0.45	0.84
		VOC	87.43	9.79

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Emission Sources - Maximum Allowable Emission Rates Before Production Expansion

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
1792-4B	H-3030 Catalytic Oxidizer	CO	5.55	24.30
		NO_X	1.11	4.86
		PM	0.09	0.12
		PM_{10}	0.09	0.12
		$PM_{2.5}$	0.09	0.12
		SO_2	0.01	0.03
		VOC	3.12	9.85
1792-4M (6)	Downtime of H-3030	VOC	35.00	3.36
1792-35	Line 1 Pellet Dryer	VOC	0.68	2.99
1792-36	Line 2 Pellet Dryer	VOC	0.68	2.99
1792-37	Line 3 Pellet Dryer	VOC	0.68	2.99
1792-38	Line 4 Pellet Dryer	VOC	0.68	2.99
1792-39	Line 5 Pellet Dryer	VOC	0.89	3.88
1792-40	Line 6 Pellet Dryer	VOC	0.89	3.88
1792-43	P-930 Stormwater Pump Engine	CO	1.50	0.06
		NO_X	6.98	0.29
		PM	0.50	0.02
		PM_{10}	0.50	0.02
		$PM_{2.5}$	0.50	0.02
		SO_2	0.46	0.02
		VOC	0.56	0.02
1792-76	Cooling Tower	PM	0.38	1.66
		PM_{10}	0.38	1.66
		$PM_{2.5}$	0.38	1.66
		VOC	1.58	1.65
LL03	Slop Oil Loading	VOC	3.16	0.08
03	Spent Solvent Tank	VOC	3.06	0.09
28	Solvent Rundown Tank	VOC	3.24	0.04
29	Solvent Holding Tank	VOC	3.24	0.08
30	Methanol Tank	VOC	17.29	0.26

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Emission Sources - Maximum Allowable Emission Rates Before Production Expansion

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
1792-11	Solvent Storage Tank	VOC	3.24	0.18
1792-47	API Skim Tank	VOC	1.01	0.20
31	Chilled Water Methanol	VOC	1.44	0.20
1792-42	Diesel Fuel Tank	VOC	0.29	0.02
1792-44	Diesel Fuel Tank	VOC	0.29	0.02
1792-45	Stormwater Holding Tank	VOC	0.14	0.02
1792-46	API Separator	VOC	0.58	2.54
1792-48	Stormwater Holding Pond	VOC	0.01	0.01
1792-50	De-Ethanizer Blowdown Drum	VOC	1.62	0.59
1792-51	De-Propanizer Blowdown Drum	VOC	1.62	0.59

(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 to or less than 2.5 microns in diameter
CO - carbon monoxide
(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) Maintenance Operations shall be limited to 480 hours per 12 month rolling period.
(7) The MAERT limits are applicable only to the pre-expansion configuration. After completion of construction and commencement of all expanded line operations, the holder of this permit shall submit a permit action to remove the MAERT limits through the appropriate permitting mechanism as required in Special Condition No. 3.

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Emission Sources - Maximum Allowable Emission Rates After Production Expansion (7)

Permit Number 2462C and N294

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)
F-75 (5)	Process Fugitives	VOC	14.18	62.09
F-05	Catalyst Mix and Holding Tanks	VOC	1.89	0.35
1592-42	Holding Pond	VOC	0.01	0.01
1792-4C	F-376 Baghouse	PM	0.02	0.05
		PM_{10}	0.02	0.05
		$PM_{2.5}$	0.02	0.05
1792-4F	F-365 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-4G	F-366 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-4H	F-367 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-4J	F-356 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-15	F-394 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-16	F-395 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02

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Emission Sources - Maximum Allowable Emission Rates After Production Expansion

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
1792-17	F-396 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-18	F-397 Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-21	F-312 Bagfilter	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-22	F-315 Bagfilter	PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
1792-23	F-320 Baghouse	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
26	H-602 Hot Oil Heater	CO	1.80	6.50
		NO_X	1.32	2.87
		PM	0.16	0.59
		PM_{10}	0.16	0.59
		$PM_{2.5}$	0.16	0.59
		SO_2	0.01	0.05
		VOC	0.12	0.43
45	X-901 Flare - Normal Operation and MSS combined	CO	80.59	53.41
		NO_X	15.69	9.33
		SO_2	0.45	0.84
		VOC	87.43	9.79

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Emission Sources - Maximum Allowable Emission Rates After Production Expansion

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
ROX-1	Regenerative Thermal Oxidizer (RTO)	CO	2.50	6.57
		NO_X	1.13	2.96
		PM	0.21	0.55
		PM_{10}	0.21	0.55
		$PM_{2.5}$	0.21	0.55
		SO_2	0.38	1.00
		VOC	1.00	2.70
ROX-DT (6)	Downtime of ROX-1	VOC	85.00	3.38
		PM	0.03	<0.01
		PM_{10}	0.03	<0.01
		$PM_{2.5}$	0.03	<0.01
F-04	Pellet Losses	VOC	10.00	-
1792-35	Line 1 Pellet Dryer	VOC	0.72	-
1792-36	Line 2 Pellet Dryer	VOC	0.72	-
1792-37	Line 3 Pellet Dryer	VOC	0.72	-
1792-38	Line 4 Pellet Dryer	VOC	0.72	-
1792-39	Line 5 Pellet Dryer	VOC	2.16	-
1792-40	Line 6 Pellet Dryer	VOC	2.16	-
PELLET	EPNs F-04, and 1792-35 through 1792-40	VOC	-	56.04
1792-43	P-930 Stormwater Pump Engine	CO	1.50	0.06
		NO_X	6.98	0.29
		PM	0.50	0.02
		PM_{10}	0.50	0.02
		$PM_{2.5}$	0.50	0.02
		SO_2	0.46	0.02
		VOC	0.56	0.02
1792-76	Cooling Tower	PM	0.38	1.44
		PM_{10}	0.38	1.44
		$PM_{2.5}$	0.38	1.44
		VOC	1.58	2.96

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Emission Sources - Maximum Allowable Emission Rates After Production Expansion

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
LL03	Slop Oil Loading	VOC	3.85	0.20
03	Spent Solvent Tank	VOC	3.06	0.11
28	Solvent Rundown Tank	VOC	3.24	0.06
29	Solvent Holding Tank	VOC	3.24	0.08
30	Methanol Tank	VOC	17.29	0.26
1792-11	Solvent Storage Tank	VOC	3.24	0.18
1792-47	API Skim Tank	VOC	1.01	0.20
31	Chilled Water Methanol	VOC	1.44	0.20
1792-42	Diesel Fuel Tank	VOC	0.29	0.02
1792-44	Diesel Fuel Tank	VOC	0.29	0.02
1792-45	Stormwater Holding Tank	VOC	0.14	0.02
1792-46	API Separator	VOC	0.58	2.54
1792-48	Stormwater Holding Pond	VOC	0.01	0.01
1792-50	De-Ethanizer Blowdown Drum	VOC	1.62	0.59
1792-51	De-Propanizer Blowdown Drum	VOC	1.62	0.59

(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 to or less than 2.5 microns in diameter
CO - carbon monoxide
(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) Regenerative Thermal Oxidizer Downtime, EPN ROX-DT, as described in Special Condition No. 13, is limited to 100 hours per 12 month rolling period.
(7) The MAERT limits are applicable to the production expansion of the Polyethylene (PEU) Unit 1792 that was represented in the permit amendment application, PI-1 dated July 1, 2015 (TCEQ Project No. 238272) and subsequent updates, and the as-built amendment application, PI-1 dated March 31, 2020 (TCEQ Project No. 314315) and subsequent updates.

Date: TBD

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WAID ENVIRONMENTAL

September 16, 2020

Ms. Ariel Ramirez
Texas Commission on Environmental Quality
Air Permits Division (MC-163)
P.O. Box 13087
Austin, Texas 78711-3087

EMAILED

Re: Chevron Phillips Chemical Company LP
Cedar Bayou Plant
Permit No. 2462C Amendment
Baytown, Harris County
Regulated Entity No. RN103919817
Customer Reference No. CN600303614

Dear Ms. Ramirez:

On behalf of Chevron Phillips Chemical, LLC I am submitting the enclosed updates to the application materials. The changes reflect updates to the netting tables associated with the change in the increase from the concurrent amendment to Permit No. 46305. In addition, we are providing an electronic mark-up for the permit language to account for the change in the required NOx offset amounts.

Attachment 1: Updated Non-Confidential Application Materials

Attachment 2: Updated Air Permit Application Workbook (also provided electronically)

Attachment 3: Comments on draft permit (also provided electronically)

Attachment 4: **Updated Confidential Application Materials**

Should you have any questions regarding this matter, please contact Mr. Oluwatobi 'Tobi' Adeyinka at (281) 421-6285.

Sincerely,

Jason M. Graves
Principal Engineer

JG/av

Enclosures

cc: Air Program Manager, Region 12, TCEQ, Houston, w/ enclosures
Director, Harris County Public Health and Environmental Services, Pasadena, w/ enclosures

ATTACHMENT 1

UPDATED NON-CONFIDENTIAL APPLICATION MATERIALS

Prepared and Approved by:

9/16/2020

Jason M. Graves, P.E.
Principal Engineer

Waid Corporation dba Waid Environmental
Certificate of Registration No. F-58

TABLE 1F
AIR QUALITY APPLICATION SUPPLEMENT

Permit No.: 19027, 37063, 2462C, 1504A, and 46305*	Application Submittal Date: March – September 2020
Company: Chevron Phillips Chemical Company LP	
RN: RN103919817	Facility Location: 9500 I-10 East
City: Baytown	County: Harris
Permit Unit I.D.: Cedar Bayou Plant Flares	Permit Name: Flare Monitoring and Operational Changes
Permit Activity: ☐ New Source ☒ Modification	

Complete for all Pollutants with a Project Emission Increase.	**POLLUTANTS**							
	Ozone							
	VOC	**NO_x**	**CO**	**PM_{10}**	**$PM_{2.5}$**	**NOx**	**SO_2**	**Other[1]**
Nonattainment?	Yes	Yes	No	No	No	No	No	NA
PSD?	No	No	Yes	Yes	Yes	Yes	Yes	NA
Existing site PTE (tpy)?	>100	>100	>100	>100	>100	>100	>100	NA
Proposed project emission increases (tpy from 2F[2])?	3.66	15.84	82.26	0	0	15.84	2.82	NA
Is the existing site a major source?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
If not, is the project a major source by itself?	NA	NA	NA	NA	NA	NA	NA	NA
If site is major source, is project increase significant?	No	Yes	No	No	No	No	No	NA
If netting required, estimated start of construction: March 2021 (Earliest Start for any flare)								
5 years prior to start of construction March 2016								
Estimated start of operation June 2021 (Earliest Start for any flare)								
Net contemporaneous change, including proposed project, from Table 3F. (tpy)	NA	>25	NA	NA	NA	NA	NA	NA
Major NSR Applicable?	No	Yes	No	No	No	No	No	No

Environmental Engineer — *Title*

September 16, 2020 — *Date*

Signature

* This Table and attached netting covers the increases across five different permits for flares associated with this project.

[1] Other pollutants. [Pb, H_2S, TRS, H_2SO_4, Fluoride excluding HF, etc.]

[2] Sum of proposed emissions minus baseline emissions, increases only.

The representations made above and on the accompanying tables are true and correct to the best of my knowledge.

TABLE 2F
PROJECT EMISSIONS INCREASE

Pollutant [1]**:** VOC	**Permit:** Various
Baseline Period: Incremental Increases **to**	

	Affected or Modified Facilities [2]		Permit	Actual Emissions [3]	Baseline Emissions [4]	Proposed Emissions [5]	Projected Actual Emissions	Difference (A-B) [5]	Correction [7]	Project Increase [8]
	FIN	EPN	NO.	(tons/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(tons/yr)
				B		A				
1	CB-710	1592-40	1504A	Incremental Inceases Only		0.13		0.13		0.13
2	FS-541-0	1796-10A	19027	Incremental Inceases Only		0.19		0.19		0.19
3	FS-9004	1799-20	46305	Incremental Inceases Only		0.04		0.04		0.04
4	P-1792	45	2462C	Incremental Inceases Only		0.52		0.52		0.52
5	Z-101	110	37063	Incremental Inceases Only		0.12		0.12		0.12
6	Z-1101	1798-22	37063	Incremental Inceases Only		0.09		0.09		0.09
7	Z-251	129	37063	Incremental Inceases Only		0.17		0.17		0.17
8	P-1592	F-1592-31	1504A	Incremental Inceases Only		0.34		0.34		0.34
9	P-1796	1796-12A	19027	Incremental Inceases Only		0.34		0.34		0.34
10	P-1799	1799-25	46305	Incremental Inceases Only		0.34		0.34		0.34
11	P-1792	F-75	2462C	Incremental Inceases Only		0.34		0.34		0.34
12	P-1791	F-130	37063	Incremental Inceases Only		0.69		0.69		0.69
13	P-1798	1798-30	37063	Incremental Inceases Only		0.34		0.34		0.34
14										
								PAGE SUBTOTAL: [9]		3.66
								Total		3.66

TABLE 2F
PROJECT EMISSIONS INCREASE

Pollutant [1]**:**	NOx/NO2	**Permit:**	Various
Baseline Period:	Incremental Increases	**to**	

	Affected or Modified Facilities [2]		Permit	Actual Emissions [3]	Baseline Emissions [4]	Proposed Emissions [5]	Projected Actual Emissions	Difference (A-B) [5]	Correction [7]	Project Increase [8]
	FIN	EPN	NO.	(tons/yr)	(ton/yr)	(tons/yr)	(ton/yr)	(tons/yr)	(ton/yr)	(tons/yr)
				B		A				
1	CB-710	1592-40	1504A	Incremental Inceases Only		1.60		1.60		1.60
2	FS-541-0	1796-10A	19027	Incremental Inceases Only		2.41		2.41		2.41
3	FS-9004	1799-20	46305	Incremental Inceases Only		0.45		0.45		0.45
4	P-1792	45	2462C	Incremental Inceases Only		6.57		6.57		6.57
5	Z-101	110	37063	Incremental Inceases Only		1.56		1.56		1.56
6	Z-1101	1798-22	37063	Incremental Inceases Only		1.15		1.15		1.15
7	Z-251	129	37063	Incremental Inceases Only		2.09		2.09		2.09
8										
9										
10										
11										
12										
13										
14										
							PAGE SUBTOTAL: [9]			15.84
								Total		15.84

TABLE 2F
PROJECT EMISSIONS INCREASE

Pollutant [1]**:** CO	**Permit:** Various
Baseline Period: Incremental Increases **to**	

	Affected or Modified Facilities [2]		Permit	Actual Emissions [3]	Baseline Emissions [4]	Proposed Emissions [5]	Projected Actual Emissions	Difference (A-B) [5]	Correction [7]	Project Increase [8]
	FIN	EPN	NO.	(tons/yr)	(ton/yr)	(tons/yr)	(ton/yr)	(tons/yr)	(ton/yr)	(tons/yr)
				B		A				
1	CB-710	1592-40	1504A	Incremental Inceases Only		8.17		8.17		8.17
2	FS-541-0	1796-10A	19027	Incremental Inceases Only		12.30		12.30		12.30
3	FS-9004	1799-20	46305	Incremental Inceases Only		3.82		3.82		3.82
4	P-1792	45	2462C	Incremental Inceases Only		33.49		33.49		33.49
5	Z-101	110	37063	Incremental Inceases Only		7.97		7.97		7.97
6	Z-1101	1798-22	37063	Incremental Inceases Only		5.87		5.87		5.87
7	Z-251	129	37063	Incremental Inceases Only		10.66		10.66		10.66
8										
9										
10										
11										
12										
13										
14										
							PAGE SUBTOTAL: [9]			82.26
								Total		82.26

TABLE 2F
PROJECT EMISSIONS INCREASE

Pollutant [1]: SO2	**Permit:** Various
Baseline Period: Incremental Increases **to**	

	Affected or Modified Facilities [2]		Permit	Actual Emissions [3]	Baseline Emissions [4]	Proposed Emissions [5]	Projected Actual Emissions	Difference (A-B) [5]	Correction [7]	Project Increase [8]
	FIN	EPN	NO.	(tons/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(tons/yr)
				B		A				
1	CB-710	1592-40	1504A	Incremental Inceases Only		0.163		0.163		0.163
2	FS-541-0	1796-10A	19027	Incremental Inceases Only		0.213		0.213		0.213
3	FS-9004	1799-20	46305	Incremental Inceases Only		0.042		0.042		0.042
4	P-1792	45	2462C	Incremental Inceases Only		0.840		0.840		0.840
5	Z-101	110	37063	Incremental Inceases Only		0.645		0.645		0.645
6	Z-1101	1798-22	37063	Incremental Inceases Only		0.334		0.334		0.334
7	Z-251	129	37063	Incremental Inceases Only		0.587		0.587		0.587
8										
9										
10										
11										
12										
13										
14										
								PAGE SUBTOTAL: [9]		2.82
								Total		2.82

ATTACHMENT 2

UPDATED AIR PERMIT APPLICATION WORKBOOK

I. Applicant Information	
I acknowledge that I am submitting an authorized TCEQ application workbook and any necessary attachments. Except for inputting the requested data and adjusting row height and column width, I have not changed the TCEQ application workbook in any way, including but not limited to changing formulas, formatting, content, or protections.	I agree

A. Company Information

Company or Legal Name:	Chevron Phillips Chemical Company LP

Permits are issued to either the facility owner or operator, commonly referred to as the applicant or permit holder. List the legal name of the company, corporation, partnership, or person who is applying for the permit. We will verify the legal name with the Texas Secretary of State at (512) 463-5555 or at:

https://www.sos.state.tx.us

Texas Secretary of State Charter/Registration Number (if given):	

B. Company Official Contact Information: must not be a consultant

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Gregory
Last Name:	Goodson
Title:	Environmental Superintendent
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6879
Fax Number:	
Email Address:	cedraenviron@cpchem.com; GOODSGA@cpchem.com

C. Technical Contact Information: This person must have the authority to make binding agreements and representations on behalf of the applicant and may be a consultant. **Additional technical contact(s) can be provided in a cover letter.**

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Oluwatobi
Last Name:	Adeyinka
Title:	Environmental Engineer
Company or Legal Name:	Chevron Phillips Chemical LP
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6285
Fax Number:	
Email Address:	ADEYIO@cpchem.com

D. Assigned Numbers

The CN and RN below are assigned when a Core Data Form is initially submitted to the Central Registry. The RN is also assigned if the agency has conducted an investigation or if the agency has issued an enforcement action. If these numbers have not yet been assigned, leave these questions blank and include a Core Data Form with your application submittal. See Section VI.B. below for additional information.

Enter the CN. The CN is a unique number given to each business, governmental body, association, individual, or other entity that owns, operates, is responsible for, or is affiliated with a regulated entity.	CN600303614
Enter the RN. The RN is a unique agency assigned number given to each person, organization, place, or thing that is of environmental interest to us and where regulated activities will occur. The RN replaces existing air account numbers. The RN for portable units is assigned to the unit itself, and that same RN should be used when applying for authorization at a different location.	RN103919817

II. Delinquent Fees and Penalties	
Does the applicant have unpaid delinquent fees and/or penalties owed to the TCEQ? This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ Web site at: https://www.tceq.texas.gov/agency/financial/fees/delin	No

III. Permit Information

A. Permit and Action Type **(multiple may be selected, leave no blanks)**

Additional information regarding the different NSR authorizations can be found at:
https://www.tceq.texas.gov/permitting/air/guidance/authorize.html

Select from the drop-down the type of action being requested for each permit type. **If that permit type does not apply, you MUST select "Not applicable".**

Provide all assigned permit numbers relevant for the project. Leave blank if the permit number has not yet been assigned.

Permit Type	**Action Type Requested** **(do not leave blank)**	**Permit Number (if assigned)**
Minor NSR (can be a Title V major source): *Not applicable, Initial, Amendment, Renewal, Renewal Certification, Renewal/Amendment, Relocation/Alteration, Change of Location, Alteration, Extension to Start of Construction*	Amendment	2462C
Special Permit: *Not applicable, Amendment, Renewal, Renewal Certification, Renewal/Amendment, Alteration, Extension to Start of Construction*	Not applicable	
De Minimis: *Not applicable, Initial*	Not applicable	
Flexible: *Not applicable, Initial, Amendment, Renewal, Renewal Certification, Renewal/Amendment, Alteration, Extension to Start of Construction*	Not applicable	
PSD: *Not applicable, Initial, Major Modification*	Not applicable	
Nonattainment: *Not applicable, Initial, Major Modification*	Initial	N294
HAP Major Source [FCAA § 112(g)]: *Not applicable, Initial, Major Modification*	Not applicable	

PAL: *Not applicable, Initial, Amendment, Renewal, Renewal/Amendment, Alteration*	Not applicable	
GHG PSD: *Not applicable, Initial, Major Modification, Voluntary Update*	Not applicable	

B. MSS Activities

How are/will MSS activities for sources associated with this project be authorized?	This permit

C. Consolidating NSR Permits

Will this permit be consolidated into another NSR permit with this action?	No
Will NSR permits be consolidated into this permit with this action?	No

D. Incorporation of Standard Permits, Standard Exemptions, and/or Permits By Rule (PBR)

To ensure protectiveness, previously issued authorizations (standard permits, standard exemptions, or PBRs) including those for MSS, are incorporated into a permit either by consolidation or by reference. At the time of renewal and/or amendment, consolidation (in some cases) may be voluntary and referencing is mandatory.More guidance regarding incorporation can be found in 30 TAC § 116.116(d)(2), 30 TAC § 116.615(3) and in this memo:

https://www.tceq.texas.gov/assets/public/permitting/air/memos/pbr_spc06.pdf

Are there any standard permits, standard exemptions, or PBRs to be incorporated by reference?	No
Are there any PBR, standard exemptions, or standard permits associated to be incorporated by consolidation? **Note:** Emission calculations, a BACT analysis, and an impacts analysis must be attached to this application at the time of submittal for any authorization to be incorporated by consolidation.	No

E. Associated Federal Operating Permits	
Is this facility located at a site required to obtain a **site operating permit (SOP)** or **general operating permit (GOP)?**	Yes
Is a **SOP** or **GOP** review pending for this source, area, or site?	Yes
If required to obtain a **SOP** or **GOP**, list all associated permit number(s). If no associated permit number has been assigned yet, enter "TBD":	O2115

IV. Facility Location and General Information	
A. Location	
County: Enter the county where the facility is physically located.	Harris
TCEQ Region	Region 12
County attainment status as of Sept. 23, 2019	Serious Ozone nonattainment
Street Address:	9500 I-10 East
City: If the address is not located in a city, then enter the city or town closest to the facility, even if it is not in the same county as the facility.	Baytown
ZIP Code: Include the ZIP Code of the physical facility site, not the ZIP Code of the applicant's mailing address.	77521
Site Location Description: If there is no street address, provide written driving directions to the site. Identify the location by distance and direction from well-known landmarks such as major highway intersections.	
Use USGS maps, county maps prepared by the Texas Department of Transportation, or an online software application such as Google Earth to find the latitude and longitude.	
Latitude (in degrees, minutes, and nearest second (DDD:MM:SS)) for the street address or the destination point of the driving directions. Latitude is the angular distance of a location north of the equator and will always be between 25 and 37 degrees north (N) in Texas.	29°49'03"N
Longitude (in degrees, minutes, and nearest second (DDD:MM:SS)) for the street address or the destination point of the driving directions. Longitude is the angular distance of a location west of the prime meridian and will always be between 93 and 107 degrees west (W) in Texas.	94°56'02"W
Is this a project for a lead smelter, concrete crushing facility, and/or a hazardous waste management facility?	No
B. General Information	
Site Name:	Cedar Bayou Plant
Area Name: Must indicate the general type of operation, process, equipment or facility. Include numerical designations, if appropriate. Examples are Sulfuric Acid Plant and No. 5 Steam Boiler. Vague names such as Chemical Plant are not acceptable.	Polyethylene Unit PEU-1792 Flare X-901

Are there any schools located within 3,000 feet of the site boundary?	No
C. Portable Facility	
Permanent or portable facility?	Permanent
D. Industry Type	
Principal Company Product/Business:	Organic Chemical Manufacturing
A list of SIC codes can be found at: https://www.naics.com/sic-codes-industry-drilldown/	
Principal SIC code:	2869
NAICS codes and conversions between NAICS and SIC Codes are available at: https://www.census.gov/eos/www/naics/	
Principal NAICS code:	325110
E. State Senator and Representative for this site	
This information can be found at (note, the website is not compatible to Internet Explorer): https://wrm.capitol.texas.gov/	
State Senator:	Brandon Creighton
District:	4
State Representative:	Briscoe Cain
District:	128

V. Project Information	
A. Description	
Provide a brief description of the project that is requested. (Limited to 500 characters).	This amendment authorizes changes to flare process monitoring and controls to optimize the addition of steam/air and supplemental natural gas which will support continued maintenance of the required net heating value in the combustion zone.
B. Project Timing	
Authorization must be obtained for many projects before beginning construction. Construction is broadly interpreted as anything other than site clearance or site preparation. Enter the date as "Month Date, Year" (e.g. July 4, 1776).	
Projected Start of Construction:	March 17, 2021
Projected Start of Operation:	June 15, 2021
C. Enforcement Projects	
Is this application in response to, or related to, an agency investigation, notice of violation, or enforcement action?	No
D. Operating Schedule	
Will sources in this project be authorized to operate 8760 hours per year?	Yes

VI. Application Materials	
All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. (30 TAC § 116.116)	
A. Confidential Application Materials	
Is confidential information submitted with this application?	Yes
If yes, is each confidential page marked "CONFIDENTIAL" in large red letters?	Yes
THSC §382.041 requires us not to disclose any information related to manufacturing processes that is marked Confidential. Mark any information related to secret or proprietary processes or methods of manufacture Confidential if you do not want this information in the public file. All confidential information should be separated from the application and submitted as a separate file. Additional information regarding confidential information can be found at: https://www.tceq.texas.gov/permitting/air/confidential.html	
B. Is the Core Data Form (Form 10400) attached?	No
https://www.tceq.texas.gov/assets/public/permitting/centralregistry/10400.docx	
C. Is a current area map attached?	Yes
Is the area map a current map with a true north arrow, an accurate scale, the entire plant property, the location of the property relative to prominent geographical features including, but not limited to, highways, roads, streams, and significant landmarks such as buildings, residences, schools, parks, hospitals, day care centers, and churches?	Yes
Does the map show a 3,000-foot radius from the property boundary?	Yes
D. Is a plot plan attached?	Yes
Does your plot plan clearly show a north arrow, an accurate scale, all property lines, all emission points, buildings, tanks, process vessels, other process equipment, and two bench mark locations?	Yes
Does your plot plan identify all emission points on the affected property, including all emission points authorized by other air authorizations, construction permits, PBRs, special permits, and standard permits?	Yes
Did you include a table of emission points indicating the authorization type and authorization identifier, such as a permit number, registration number, or rule citation under which each emission point is currently authorized?	Yes
E. Is a process flow diagram attached?	Yes
Is the process flow diagram sufficiently descriptive so the permit reviewer can determine the raw materials to be used in the process; all major processing steps and major equipment items; individual emission points associated with each process step; the location and identification of all emission abatement devices; and the location and identification of all waste streams (including wastewater streams that may have associated air emissions)?	Yes
F. Is a process description attached?	Yes
Does the process description emphasize where the emissions are generated, why the emissions must be generated, what air pollution controls are used (including process design features that minimize emissions), and where the emissions enter the atmosphere?	Yes
Does the process description also explain how the facility or facilities will be operating when the maximum possible emissions are produced?	Yes
G. Are detailed calculations attached? Calculations must be provided for each source with new or changing emission rates. For example, a new source, changing emission factors, decreasing emissions, consolidated sources, etc. You do not need to submit calculations for sources which are not changing emission rates with this project. Please note: the preferred format is an electronic workbook (such as Excel) with all formulas viewable for review. It can be emailed with the submittal of this application workbook.	Yes
Are emission rates and associated calculations for planned MSS facilities and related activities attached?	Yes

H. Is a material balance (Table 2, Form 10155) attached?	N/A
I. Is a list of MSS activities attached?	Yes
Are the MSS activities listed and discussed separately, each complete with the authorization mechanism or emission rates, frequency, duration, and supporting information if authorized by this permit?	Yes
J. Is a discussion of state regulatory requirements attached, addressing 30 TAC Chapters 101, 111, 112, 113, 115, and 117?	Yes
For all applicable chapters, does the discussion include how the facility will comply with the requirements of the chapter?	Yes
For all not applicable chapters, does the discussion include why the chapter is not applicable?	Yes
K. Are all other required tables, calculations, and descriptions attached?	Yes

VII. Signature

The owner or operator of the facility must apply for authority to construct. The appropriate company official (owner, plant manager, president, vice president, or environmental director) must sign all copies of the application. The applicant's consultant cannot sign the application. **Important Note: Signatures must be original in ink, not reproduced by photocopy, fax, or other means, and must be received before any permit is issued.**

The signature below confirms that I have knowledge of the facts included in this application and that these facts are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project for which application is made will not in any way violate any provision of the Texas Water Code (TWC), Chapter 7; the Texas Health and Safety Code, Chapter 382; the Texas Clean Air Act (TCAA); the air quality rules of the Texas Commission on Environmental Quality; or any local governmental ordinance or resolution enacted pursuant to the TCAA. I further state that I understand my signature indicates that this application meets all applicable nonattainment, prevention of significant deterioration, or major source of hazardous air pollutant permitting requirements. The signature further signifies awareness that intentionally or knowingly making or causing to be made false material statements or representations in the application is a criminal offense subject to criminal penalties.

Name:	Gregory Goodson
Signature:	
Original signature is required.	
Date:	May 4, 2020

V. Nonattainment Permits	
Complete the offsets section of the Federal Applicability sheet of this workbook.	Yes
Does the application contain a detailed LAER analysis? (attachment or as notes on the BACT sheet of this workbook)	Yes
Does the application contain an analysis of alternative sites, sizes, production processes, and control techniques for the proposed source? The analysis must demonstrate that the benefits of the proposed location and source configuration significantly outweigh the environmental and social costs of that locati+A124on.	Yes

VIII. Federal Regulatory Questions	
Indicate if any of the following requirements apply to the proposed facility. Note that some federal regulations apply to minor sources. Enter all applicable Subparts.	
A. Title 40 CFR Part 60	
Do NSPS subpart(s) apply to a facility in this application?	Yes
List applicable subparts you will demonstrate compliance with (e.g. Subpart M)	Subparts A and DDD
B. Title 40 CFR Part 61	
Do NESHAP subpart(s) apply to a facility in this application?	No
C. Title 40 CFR Part 63	
Do MACT subpart(s) apply to a facility in this application?	Yes
List applicable subparts you will demonstrate compliance with (e.g. Subpart VVVV)	Subparts A, FFFF (SS and UU only as referenced by FFFF), ZZZZ, and DDDDD

IX. Emissions Review	
A. Impacts Analysis	
Any change that results in an increase in off-property concentrations of air contaminants requires an air quality impacts demonstration. Information regarding the air quality impacts demonstration must be provided with the application and show compliance with all state and federal requirements. Detailed requirements for the information necessary to make the demonstration are listed on the Impacts sheet of this workbook.	
Does this project require an impacts analysis?	Yes
B. Disaster Review	
If the proposed facility will handle sufficient quantities of certain chemicals which, if released accidentally, would cause off-property impacts that could be immediately dangerous to life and health, a disaster review analysis may be required as part of the application. Contact the appropriate NSR permitting section for assistance at (512) 239-1250. Additional Guidance can be found at: https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/disrev-factsheet.pdf	
Does this application involve any air contaminants for which a disaster review is required?	No
C. Air Pollutant Watch List	
Certain areas of the state have concentrations of specific pollutants that are of concern. The TCEQ has designated these portions of the state as watch list areas. Location of a facility in a watch list area could result in additional restrictions on emissions of the affected air pollutant(s) or additional permit requirements. The location of the areas and pollutants of interest can be found at: https://www.tceq.texas.gov/toxicology/apwl/apwl.html	
Is the proposed facility located in a watch list area?	No

D. Mass Emissions Cap and Trade	
Is this facility located at a site within the Houston/Galveston nonattainment area (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties)?	Yes
Is Mass Emissions Cap and Trade applicable to the new or modified facilities?	No

X. Additional Requirements	
A. Bulk Fuel Terminals	
Is this project for a bulk fuel terminal?	No
B. Plant Fuel Gas Facilities	
Does this site utilize plant fuel gas?	No

Texas Commission on Environmental Quality
Form PI-1 General Application
Unit Types - Emission Rates

Permit primary industry (must be selected for workbook to function)	Chemical / Energy

Action Requested (only 1 action per FIN)	Include these emissions in annual (tpy) summary?	Facility ID Number (FIN)	Emission Point Number (EPN)	Source Name	Pollutant	Current Short-Term (lb/hr)	Current Long-Term (tpy)	Consolidated Current Short-Term (lb/hr)	Consolidated Current Long-Term (tpy)	Proposed Short-Term (lb/hr)	Proposed Long-Term (tpy)	Short-Term Difference (lb/hr)	Long-Term Difference (tpy)	Unit Type (Used for reviewing BACT and Monitoring Requirements)	Unit Type Notes (only if "other" unit type in Column O)
New/Modified	Yes	P-1792 (F)	F-75	Process Fugitives (BE)	VOC	13.42	58.78			13.5	59.12	*0.0801*	*0.34*	Fugitives: Piping and Equipment Leak	
Not New/Modified	Yes	P-1792	F04	Pellet Losses (BE)	VOC	52.3	78.3			52.3	78.3	0	0	Polyethylene Facilities	
Not New/Modified	Yes	P-1792	F-05	Catalyst Mix and Holding tanks (BE)	VOC	1.89	0.2			1.89	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	G-217	1592-42	Holding Pond (BE)	VOC	0.01	0.01			0.01	0.01	0	0	Other	Stormwater Pond
Not New/Modified	Yes	F-355	25	F-355 Bagfilter (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-376	1792-4C	F-376 Baghouse (BE)	PM	0.02	0.05			0.02	0.05	0	0	Control: Bag Filter/Baghouse	
					PM10	0.02	0.05			0.02	0.05	0	0		
					PM2.5	0.02	0.05			0.02	0.05	0	0		
Not New/Modified	Yes	F-365	1792-4F	F-365 Baghouse (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-366	1792-4G	F-366 Baghouse (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-367	1792-4H	F-367 Baghouse (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-356	1792-4J	F-356 Baghouse (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-394	1792-15	F-394 Baghouse (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-395	1792-16	F-395 Baghouse (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-396	1792-17	F-396 Baghouse (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-397	1792-18	F-397 Baghouse (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-312	1792-21	F-312 Bagfilter (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-315	1792-22	F-315 Bagfilter (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-320	1792-23	F-320 Baghouse (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	H-602	26	H-602 Hot Oil Heater (BE)	VOC	0.12	0.43			0.12	0.43	0	0	Heater	
					NOx	1.32	2.87			1.32	2.87	0	0		
					CO	1.8	6.5			1.8	6.5	0	0		
					SO2	0.01	0.05			0.01	0.05	0	0		
					PM	0.16	0.59			0.16	0.59	0	0		
					PM10	0.16	0.59			0.16	0.59	0	0		
					PM2.5	0.16	0.59			0.16	0.59	0	0		
New/Modified	Yes	P-1792	45	X-901 Flare - Normal and MSS combined (BE)	VOC	87.3	9.27			87.43	9.79	*0.1301*	*0.52*	Control: Flare	
					NOx	14.09	2.76			15.69	9.33	*1.6*	*6.57*		
					CO	72.45	19.92			80.59	53.41	*8.14*	*33.49*		
					SO2	0.04	0.03			0.45	0.84	*0.41*	*0.81*		
Not New/Modified	Yes	H-3030	1792-4B	H-3030 Catalytic Oxidizer (BE)	VOC	3.12	9.85			3.12	9.85	0	0	Control: Oxidizer: Catalytic	
					NOx	1.11	4.86			1.11	4.86	0	0		
					CO	5.55	24.3			5.55	24.3	0	0		
					SO2	0.01	0.03			0.01	0.03	0	0		
					PM	0.09	0.12			0.09	0.12	0	0		
					PM10	0.09	0.12			0.09	0.12	0	0		
					PM2.5	0.09	0.12			0.09	0.12	0	0		
Not New/Modified	Yes	H-3030	1792-4M	Downtime of H-3030 (BE)	VOC	35	3.36			35	3.36	0	0	MSS Activities	

Texas Commission on Environmental Quality
Form PI-1 General Application
Unit Types - Emission Rates

Action Requested (only 1 action per FIN)	Include these emissions in annual (tpy) summary?	Facility ID Number (FIN)	Emission Point Number (EPN)	Source Name	Pollutant	Current Short-Term (lb/hr)	Current Long-Term (tpy)	Consolidated Current Short-Term (lb/hr)	Consolidated Current Long-Term (tpy)	Proposed Short-Term (lb/hr)	Proposed Long-Term (tpy)	Short-Term Difference (lb/hr)	Long-Term Difference (tpy)	Unit Type (Used for reviewing BACT and Monitoring Requirements)	Unit Type Notes (only if "other" unit type in Column O)
Not New/Modified	Yes	B-112	1792-35	Line 1 Pellet Dryer (BE)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-113	1792-36	Line 2 Pellet Dryer (BE)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-114	1792-37	Line 3 Pellet Dryer (BE)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-115	1792-38	Line 4 Pellet Dryer (BE)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-1506	1792-39	Line 5 Pellet Dryer (BE)	VOC	0.89	3.88			0.89	3.88	0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-1606	1792-40	Line 6 Pellet Dryer (BE)	VOC	0.89	3.88			0.89	3.88	0	0	Polyethylene Facilities	
Not New/Modified	Yes	P-930	1792-43	P-930 Stormwater Pump Engine (BE)	VOC	0.56	0.02			0.56	0.02	0	0	Engine: Emergency, Diesel	
					NOx	6.98	0.29			6.98	0.29	0	0		
					CO	1.5	0.06			1.5	0.06	0	0		
					SO2	0.46	0.02			0.46	0.02	0	0		
					PM	0.5	0.02			0.5	0.02	0	0		
					PM10	0.5	0.02			0.5	0.02	0	0		
					PM2.5	0.5	0.02			0.5	0.02	0	0		
Not New/Modified	Yes	E-502	1792-76	Cooling Tower (BE)	VOC	1.58	1.65			1.58	1.65	0	0	Cooling Tower	
					PM	0.38	1.66			0.38	1.66	0	0		
					PM10	0.38	1.66			0.38	1.66	0	0		
					PM2.5	0.38	1.66			0.38	1.66	0	0		
Not New/Modified	Yes	P-1792	LL03	Slop Oil Loading (BE)	VOC	3.16	0.08			3.16	0.08	0	0	Loading: Truck	
Not New/Modified	Yes	TK-902	03	Spent Solvent Tank (BE)	VOC	3.06	0.09			3.06	0.09	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-402	28	Solvent Rundown Tank (BE)	VOC	3.24	0.04			3.24	0.04	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-401	29	Solvent Holding Tank (BE)	VOC	3.24	0.08			3.24	0.08	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-405	30	Methanol Tank (BE)	VOC	17.29	0.26			17.29	0.26	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-912	1792-11	Solvent Storage Tank (BE)	VOC	3.24	0.18			3.24	0.18	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-903	1792-47	API Skim Tank (BE)	VOC	1.01	0.2			1.01	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-430	31	Chilled Water Methanol (BE)	VOC	1.44	0.2			1.44	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-905	1792-42	Diesel Fuel Tank (BE)	VOC	0.29	0.02			0.29	0.02	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-930	1792-44	Diesel Fuel Tank (BE)	VOC	0.29	0.02			0.29	0.02	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-904	1792-45	Stormwater Holding Tank (BE)	VOC	0.14	0.02			0.14	0.02	0	0	Other	Stormwater Equipment
Not New/Modified	Yes	G-214	1792-46	API Separator (BE)	VOC	0.58	2.54			0.58	2.54	0	0	Wastewater Facilities	
Not New/Modified	Yes	G-212	1792-48	Stormwater Holding Pond (BE)	VOC	0.01	0.01			0.01	0.01	0	0	Other	Stormwater Equipment
Not New/Modified	Yes	P-1792	1792-50	De-ethanizer Blowdown Drum (BE)	VOC	1.62	0.59			1.62	0.59	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	P-1792	1792-51	Depropanizer Blowdown Drum (BE)	VOC	1.62	0.59			1.62	0.59	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
New/Modified	No	P-1792	F-75	Process Fugitives (AE)	VOC	14.1	61.75			14.18	62.09	*0.0801*	*0.3401*	Fugitives: Piping and Equipment Leak	
Not New/Modified	Yes	P-1792	F-05	Catalyst Mix and Holding tanks (AE)	VOC	1.89	0.35			1.89	0.35	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	G-217	1592-42	Holding Pond (AE)	VOC	0.01	0.01			0.01	0.01	0	0	Other	Stormwater Pond
Not New/Modified	Yes	F-376	1792-4C	F-376 Baghouse (AE)	PM	0.02	0.05			0.02	0.05	0	0	Control: Bag Filter/Baghouse	
					PM10	0.02	0.05			0.02	0.05	0	0		
					PM2.5	0.02	0.05			0.02	0.05	0	0		
Not New/Modified	Yes	F-365	1792-4F	F-365 Baghouse (AE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-366	1792-4G	F-366 Baghouse (AE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-367	1792-4H	F-367 Baghouse (AE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-356	1792-4J	F-356 Baghouse (AE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-394	1792-15	F-394 Baghouse (BE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		

Action Requested (only 1 action per FIN)	Include these emissions in annual (tpy) summary?	Facility ID Number (FIN)	Emission Point Number (EPN)	Source Name	Pollutant	Current Short-Term (lb/hr)	Current Long-Term (tpy)	Consolidated Current Short-Term (lb/hr)	Consolidated Current Long-Term (tpy)	Proposed Short-Term (lb/hr)	Proposed Long-Term (tpy)	Short-Term Difference (lb/hr)	Long-Term Difference (tpy)	Unit Type (Used for reviewing BACT and Monitoring Requirements)	Unit Type Notes (only if "other" unit type in Column O)
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-395	1792-16	F-395 Baghouse (AE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-396	1792-17	F-396 Baghouse (AE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-397	1792-18	F-397 Baghouse (AE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-312	1792-21	F-312 Bagfilter (AE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-315	1792-22	F-315 Bagfilter (AE)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-320	1792-23	F-320 Baghouse (AE)	PM	0.01	0.01			0.01	0.01	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.01			0.01	0.01	0	0		
					PM2.5	0.01	0.01			0.01	0.01	0	0		
Not New/Modified	Yes	H-602	26	H-602 Hot Oil Heater (AE)	VOC	0.12	0.43			0.12	0.43	0	0	Heater	
					NOx	1.32	2.87			1.32	2.87	0	0		
					CO	1.8	6.5			1.8	6.5	0	0		
					SO2	0.01	0.05			0.01	0.05	0	0		
					PM	0.16	0.59			0.16	0.59	0	0		
					PM10	0.16	0.59			0.16	0.59	0	0		
					PM2.5	0.16	0.59			0.16	0.59	0	0		
New/Modified	No	P-1792	45	X-901 Flare - Normal and MSS (AE)	VOC	87.3	9.27			87.43	9.79	*0.1301*	*0.52*	Control: Flare	
					NOx	14.09	2.76			15.69	9.33	*1.6*	*6.57*		
					CO	72.45	19.92			80.59	53.41	*8.14*	*33.49*		
					SO2	0.04	0.03			0.45	0.84	*0.41*	*0.81*		
Not New/Modified	Yes	ROX-1	ROX-1	Regenerative Thermal Oxidizer (RTO) (AE)	VOC	1	2.7			1	2.7	0	0	Control: Oxidizer: Regenerative Thermal	
					NOx	1.13	2.96			1.13	2.96	0	0		
					CO	2.5	6.57			2.5	6.57	0	0		
					SO2	0.38	1			0.38	1	0	0		
					PM	0.21	0.55			0.21	0.55	0	0		
					PM10	0.21	0.55			0.21	0.55	0	0		
					PM2.5	0.21	0.55			0.21	0.55	0	0		
Not New/Modified	Yes	ROX-DT	ROX-DT	Downtime of ROX-1 (AE)	VOC	85	3.38			85	3.38	0	0	MSS Activities	
					PM	0.03	0.01			0.03	0.01	0	0		
					PM10	0.03	0.01			0.03	0.01	0	0		
					PM2.5	0.03	0.01			0.03	0.01	0	0		
Not New/Modified	Yes	P-1792	F04	Pellet Losses (AE)	VOC	10				10		0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-112	1792-35	Line 1 Pellet Dryer (AE)	VOC	0.72				0.72		0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-113	1792-36	Line 2 Pellet Dryer (AE)	VOC	0.72				0.72		0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-114	1792-37	Line 3 Pellet Dryer (AE)	VOC	0.72				0.72		0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-115	1792-38	Line 4 Pellet Dryer (AE)	VOC	0.72				0.72		0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-1506	1792-39	Line 5 Pellet Dryer (AE)	VOC	2.16				2.16		0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-1606	1792-40	Line 6 Pellet Dryer (AE)	VOC	2.16				2.16		0	0	Polyethylene Facilities	
Not New/Modified	Yes	P-1792, B-112, B-113, B-114, B-115, B-1506, B-1606	PELLET	Includes EPNs F-04, 1792-35, 1792-36, 1792-37, 1792-38, 1792-39, 1792-40 (AE)	VOC		56.04				56.04	0	0	Polyethylene Facilities	
Not New/Modified	Yes	P-930	1792-43	P-930 Stormwater Pump Engine (AE)	VOC	0.56	0.02			0.56	0.02	0	0	Engine: Emergency, Diesel	
					NOx	6.98	0.29			6.98	0.29	0	0		
					CO	1.5	0.06			1.5	0.06	0	0		
					SO2	0.46	0.02			0.46	0.02	0	0		
					PM	0.5	0.02			0.5	0.02	0	0		
					PM10	0.5	0.02			0.5	0.02	0	0		
					PM2.5	0.5	0.02			0.5	0.02	0	0		
Not New/Modified	Yes	E-502	1792-76	Cooling Tower (AE)	VOC	1.58	2.96			1.58	2.96	0	0	Cooling Tower	
					PM	0.38	1.44			0.38	1.44	0	0		
					PM10	0.38	1.44			0.38	1.44	0	0		
					PM2.5	0.38	1.44			0.38	1.44	0	0		
Not New/Modified	Yes	P-1792	LL03	Slop Oil Loading (AE)	VOC	3.85	0.2			3.85	0.2	0	0	Loading: Truck	

Texas Commission on Environmental Quality
Form PI-1 General Application
Unit Types - Emission Rates

Action Requested (only 1 action per FIN)	Include these emissions in annual (tpy) summary?	Facility ID Number (FIN)	Emission Point Number (EPN)	Source Name	Pollutant	Current Short-Term (lb/hr)	Current Long-Term (tpy)	Consolidated Current Short-Term (lb/hr)	Consolidated Current Long-Term (tpy)	Proposed Short-Term (lb/hr)	Proposed Long-Term (tpy)	Short-Term Difference (lb/hr)	Long-Term Difference (tpy)	Unit Type (Used for reviewing BACT and Monitoring Requirements)	Unit Type Notes (only if "other" unit type in Column O)
Not New/Modified	Yes	TK-902	03	Spent Solvent Tank (AE)	VOC	3.06	0.11			3.06	0.11	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-402	28	Solvent Rundown Tank (AE)	VOC	3.24	0.06			3.24	0.06	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-401	29	Solvent Holding Tank (AE)	VOC	3.24	0.08			3.24	0.08	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-405	30	Methanol Tank (AE)	VOC	17.29	0.26			17.29	0.26	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-912	1792-11	Solvent Storage Tank (BE)	VOC	3.24	0.18			3.24	0.18	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-903	1792-47	API Skim Tank (BE)	VOC	1.01	0.2			1.01	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	

Emission Point Discharge Parameters												
EPN	Included in EMEW?	UTM Coordinates Zone	East (Meters)	North (Meters)	Building Height (ft)	Height Above Ground (ft)	Stack Exit Diameter (ft)	Velocity (FPS)	Temperature (°F)	Fugitives - Length (ft)	Fugitives - Width (ft)	Fugitives - Axis Degrees
F-75	Yes											
F04	No	15	313972	3300591		0				120	50	90
F-05	No	15	314000	3301020		15				750	250	90
1592-42	No	15	314748	3301219								
25	No	15	314038	3300892		25	1	161	100			
1792-4C	No	15	314080	3300830	10	28	0.067	44.78	Amb.			
1792-4F	No	15	314060	3300790		20	0.067	44.78	Amb.			
1792-4G	No	15	314045	3300790		20	0.067	44.78	Amb.			
1792-4H	No	15	314035	3300790		20	0.067	44.78	Amb.			
1792-4J	No	15	314010	3300790		20	0.067	44.78	Amb.			
1792-15	No	15	314020	3300800		20	0.067	44.78	Amb.			
1792-16	No	15	314025	3300800		20	0.067	44.78	Amb.			
1792-17	No	15	314015	3300800		20	0.067	44.78	Amb.			
1792-18	No	15	314160	3300800		20	0.067	44.78	Amb.			
1792-21	No	15	314028	3300670		20	0.067	44.78	Amb.			
1792-22	No	15	314026	3300850		20	0.067	44.78	Amb.			
1792-23	No	15	314515	3300900		20	0.067	44.78	Amb.			
26	No	15	313920	3300900	25	62	3	7.36	850			
45	Yes											
1792-4B	No	15	314140	3300840		35	2.5	42	450			
1792-4M	No	15	314144	3300868		40	1.67	123	100			
1792-35	No	15	313970	3301310		4	1.13	63.8	70			
1792-36	No	15	314001	3301315		4	1.22	54.7	70			
1792-37	No	15	314031	3301320		4	1.22	54.7	70			
1792-38	No	15	314057	3301322		4	1.22	54.7	70			
1792-39	No	15	313892	3301080		4	1	85	70			
1792-40	No	15	313853	3301080		4	1	85	70			
1792-43	No	15	314205	3301070		6	0.25	289	950			
1792-76	No	15	314000	3300950		40	22	0.003	Amb.			
LL03	No	15	314200	3301060		10	2	0.08	70			
03	No	15	314300	3300700		12	0.01	0.01	Amb.			
28	No	15	314062	3301015		12	0.01	0.01	Amb.			
29	No	15	314053	3301015		18	0.01	0.01	Amb.			
30	No	15	314121	3300948		16	0.01	0.01	Amb.			
1792-11	No	15	313810	3300810		12	0.01	0.01	Amb.			
1792-47	No	15	314230	3301070		10	0.01	0.01	Amb.			
31	No	15	314062	3300985		12	0.18	0.4	75			
1792-42	No	15	314167	3301133		10	0.01	0.01	Amb.			
1792-44	No	15	314205	3301070		10	0.01	0.01	Amb.			
1792-45	No	15	314270	3301100		30	0.01	0.01	Amb.			
1792-46	No	15	314200	3301070								
1792-48	No	15	314200	3301270								

Texas Commission on Environmental Quality
Form PI-1 General Application
Stack Parameters

EPN	Included in EMEW?	UTM Coordinates Zone	East (Meters)	North (Meters)	Building Height (ft)	Height Above Ground (ft)	Stack Exit Diameter (ft)	Velocity (FPS)	Temperature (°F)	Fugitives - Length (ft)	Fugitives - Width (ft)	Fugitives - Axis Degrees
1792-50	No	15	314050	3301167	3	3	0.2	0	Amb.			
1792-51	No	15	314056	3301168	3	3	0.2	0	Amb.			
ROX-1	No	15	314140	3300840		35	2.5	42	450			
ROX-DT	No	15	314140	3300840		35	2.5	42	450			
PELLET	No	15	313970	3301310		0	3.28	0.003	Amb.			

I. Public Notice Applicability

A. Application Type

Is this an application for a new or major modification of a PSD (including GHG), Nonattainment, or HAP permit?	Yes
Is this an application for a minor permit amendment?	Yes
Is there any change in character of emissions in this application (a new criteria pollutant or a new VOC or PM species)?	No
Is there a new air contaminant in this application?	No

B. Project Increases and Public Notice Thresholds (for Initial and Amendment Projects)

For public notice applicability, the agency does not include consolidation or incorporation of any previously authorized facility or activity (PBR, standard permits, etc.), changes to permitted allowable emission rates when exclusively due to changes to standardized emission factors, or reductions in emissions which are not enforceable through the amended permit. Thus, the total emissions increase would be the sum of emissions increases under the amended permit and the emissions decreases under the amended permit for each air contaminant.

The table below will generate emission increases based on the values represented on the "Unit Types - Emission Rates" sheet. Use the "yes" and "no" options in column B of the "Unit Types - Emission Rates" worksheet to indicate if a unit's proposed change of emissions should be included in these totals.

Notes:

1. Emissions of PM, PM10, and/or PM2.5 may have been previously quantified and authorized as PM, PM10,and/or PM2.5. These emissions will be speciated based on current guidance and policy to demonstrate compliance with current standards and public notice requirements may change during the permit review.

2. All renewals require public notice.

This row is optional. If you do not think the table below accurately represents public notice applicability increases for your project, provide discussion here (1000 characters).	
Do the facilities handle, load, unload, dry, manufacture, or process grain, seed, legumes, or vegetable fibers (agricultural facilities)?	No

Pollutant	Current Long-Term (tpy)	Consolidated Emissions (tpy)	Proposed Long-Term (tpy)	Project Change in Allowable (tpy)	PN Threshold	Notice required?
VOC	257.48	0.00	258.34	0.86	5	No
PM	5.55	0.00	5.55	0.00	5	No
PM_{10}	5.55	0.00	5.55	0.00	5	No
$PM_{2.5}$	5.55	0.00	5.55	0.00	5	No
NO_x	16.90	0.00	23.47	6.57	5	Yes
CO	63.91	0.00	97.40	33.49	50	No
SO_2	1.20	0.00	2.01	0.81	10	No
Pb	0.00	0.00	0.00	0.00	0.6	No

* Notice is required for PM, PM10, and PM2.5 if one of these pollutants is above the threshold.

** Notice of a GHG action is determined by action type. Initial and major modification always require notice. Voluntary updates require a consolidated notice if there is a change to BACT. Project emission increases of CO2e (CO2 equivalent) are not relevant for determining public notice of GHG permit actions.

C. Is public notice required for this project as represented in this workbook? If no, proceed to Section III Small Business Classification. Note: public notice applicability for this project may change throughout the technical review.	Yes
D. Are any HAPs to be authorized/re-authorized with this project? The category "HAPs" must be specifically listed in the public notice if the project authorizes (reauthorizes for renewals) any HAP pollutants.	No

II. Public Notice Information

Complete this section if public notice is required (determined in the above section) or if you are not sure if public notice is required.

A. Contact Information

Enter the contact information for the **person responsible for publishing.** This is a designated representative who is responsible for ensuring public notice is properly published in the appropriate newspaper and signs are posted at the facility site. This person will be contacted directly when the TCEQ is ready to authorize public notice for the application.

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Gregory
Last Name:	Goodson
Title:	Environmental Superintendent
Company Name:	Chevron Phillips Chemical Company LP
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6879
Fax Number:	
Email Address:	GOODSGA@cpchem.com

Enter the contact information for the **Technical Contact.** This is the designated representative who will be listed in the public notice as a contact for additional information.

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Oluwatobi
Last Name:	Adeyinka
Title:	Environmental Engineer
Company Name:	Chevron Phillips Chemical LP
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6285
Fax Number:	
Email Address:	ADEYIO@cpchem.com

B. Public place

Place a copy of the full application (including all of this workbook and all attachments) at a public place in the county where the facilities are or will be located. You must state where in the county the application will be available for public review and comment. The location must be a public place and described in the notice. A public place is a location which is owned and operated by public funds (such as libraries, county courthouses, city halls) and cannot be a commercial enterprise. You are required to pre-arrange this availability with the public place indicated below. The application must remain available from the first day of publication through the designated comment period.

If this is an application for a PSD, nonattainment, or FCAA §112(g) permit, the public place must have internet access available for the public as required in 30 TAC § 39.411(f)(3).

If the application is submitted to the agency with information marked as Confidential, you are required to indicate which specific portions of the application are not being made available to the public. These portions of the application must be accompanied with the following statement: ***Any request for portions of this application that are marked as confidential must be submitted in writing, pursuant to the Public Information Act, to the TCEQ Public Information Coordinator, MC 197, P.O. Box 13087, Austin, Texas 78711-3087.***

Name of Public Place:	TXPublicNotice.com and Sterling Municipal Library
Physical Address:	1 Mary Elizabeth Wilbanks Avenue
Address Line 2:	
City:	Baytown
ZIP Code:	77520
County:	Harris
Has the public place granted authorization to place the application for public viewing and copying?	Yes
Does the public place have Internet access available for the public?	Yes

C. Alternate Language Publication

In some cases, public notice in an alternate language is required. If an elementary or middle school nearest to the facility is in a school district required by the Texas Education Code to have a bilingual program, a bilingual notice will be required. If there is no bilingual program required in the school nearest the facility, but children who would normally attend those schools are eligible to attend bilingual programs elsewhere in the school district, the bilingual notice will also be required. If it is determined that alternate language notice is required, you are responsible for ensuring that the publication in the alternate language is complete and accurate in that language.

Is a bilingual program required by the Texas Education Code in the School District?	Yes
Are the children who attend either the elementary school or the middle school closest to your facility eligible to be enrolled in a bilingual program provided by the district?	Yes
If yes to either question above, list which language(s) are required by the bilingual program?	Spanish

D. PSD and Nonattainment Permits Only	
If this is an application for emissions of GHGs, select either "Separate Public Notice" or "Consolidated Public Notice". Note: Separate public notices requires a separate application.	Not applicable

We must notify the applicable county judge and presiding officer when a PSD or Nonattainment permit or modification application is received. This information can be obtained at:

https://www.txdirectory.com

Provide the information for the **County Judge** for the location where the facility is or will be located.

The Honorable:	Lina Hidalgo
Mailing Address:	1001 Preston, Suite 911
Address Line 2:	
City:	Houston
State:	Texas
ZIP Code:	77002

Provide the information for the **Presiding Officer(s)** of the municipality for this facility site. This is frequently the Mayor.

First Name:	Brandon
Last Name:	Capetillo
Title:	Mayor
Mailing Address:	2401 Market St.
Address Line 2:	
City:	Baytown
State:	TX
ZIP Code:	77520
Are the proposed facilities located within 100 km or less of an affected state or Class I Area?	No

III. Small Business Classification	
Complete this section to determine small business classification. If a small business requests a permit, agency rules (30 TAC § 39.603(f)(1)(A)) allow for alternative public notification requirements if all of the following criteria are met. If these requirements are met, public notice does not have to include publication of the prominent (12 square inch) newspaper notice.	
Does the company (including parent companies and subsidiary companies) have fewer than 100 employees or less than $6 million in annual gross receipts?	No
Small business classification:	**No**

I. County Classification	
Does the project require retrospective review?	No
County (completed for you from your response on the General sheet)	Harris
This project will be located in an area that is in serious nonattainment for ozone as of Sept. 23, 2019. Select from the drop-down list to the right if you would like the project to be reviewed under a different classification.	Ozone - Serious
Determination:	**This project will be located in a county with a Serious Ozone nonattainment classification, and the project will be reviewed under a Serious Ozone nonattainment classification. Complete the nonattainment section below and provide an analysis with the application.**

II. PSD and GHG PSD Applicability Summary			
Is netting required for the PSD analysis for this project?			**No**
Pollutant	**Project Increase**	**Threshold**	**PSD Review Required?**
CO	82.26	100	No
NO_x	15.84	25	No
PM	0	25	No
PM_{10}	0	15	No
$PM_{2.5}$	0	10	No
SO_2	2.82	40	No
Pb			
H_2S			
TRS			
Reduced sulfur compounds (including H_2S)			
H_2SO_4			
Fluoride (excluding HF)			
CO2e			

III. Nonattainment Applicability Summary			
Is netting required for the nonattainment analysis for this project?			**Yes**
If yes, the project increases listed below should be after netting has been performed. Attach the netting information to the application.			
Pollutant	**Project Increase (after netting)**	**Threshold**	**NA Review Required?**
Ozone (as VOC)	3.66	5	No
Ozone (as NO_x)	15.84	5	Yes

IV. Offset Summary (for Nonattainment Permits)			
Pollutant	**Offset Ratio**	**Offset Quantity Required (tpy)**	**Where is the offset coming from?**
Ozone (as NO_x)	1.20 : 1	19.008	NOX ERCs

I. General Information - Non-Renewal	
Is this project for new facilities controlled and operated directly by the federal government? (30 TAC § 116.141(b)(1) and 30 TAC § 116.163(a))	No
A fee of $75,000 shall be required if no estimate of capital project cost is included with the permit application. (30 TAC § 116.141(d)) Select "yes" here to use this option. Then skip sections II and III.	No
Select Application Type	Major Application

II. Direct Costs - Non-Renewal	
Type of Cost	**Amount**
Process and control equipment not previously owned by the applicant and not currently authorized under this chapter.	$27,000.00
Auxiliary equipment, including exhaust hoods, ducting, fans, pumps, piping, conveyors, stacks, storage tanks, waste disposal facilities, and air pollution control equipment specifically needed to meet permit and regulation requirements.	$62,000.00
Freight charges.	$4,000.00
Site preparation, including demolition, construction of fences, outdoor lighting, road, and parking areas.	$169,000.00
Installation, including foundations, erection of supporting structures, enclosures or weather protection, insulation and painting, utilities and connections, process integration, and process control equipment.	$482,000.00
Auxiliary buildings, including materials storage, employee facilities, and changes to existing structures.	$0.00
Ambient air monitoring network.	$0.00
Sub-Total:	$744,000.00

III. Indirect Costs - Non-Renewal	
Type of Cost	**Amount**
Final engineering design and supervision, and administrative overhead.	$364,000.00
Construction expense, including construction liaison, securing local building permits, insurance, temporary construction facilities, and construction clean-up.	$529,000.00
Contractor's fee and overhead.	$263,000.00
Sub-Total:	$1,156,000.00

IV. Calculations - Non-Renewal
For GHG permits: A single PSD fee (calculated on the capital cost of the project per 30 TAC § 116.163) will be required for all of the associated permitting actions for a GHG PSD project. Other NSR permit fees related to the project that have already been remitted to the TCEQ can be subtracted when determining the appropriate fee to submit with the GHG PSD application. Identify these other fees in the GHG PSD permit application.

In signing the "General" sheet with this fee worksheet attached, I certify that the total estimated capital cost of the project as defined in 30 TAC §116.141 is equal to or less than the above figure. I further state that I have read and understand Texas Water Code § 7.179, which defines Criminal Offenses for certain violations, including intentionally or knowingly making, or causing to be made, false material statements or representations.

Estimated Capital Cost		Major Application Fee
Less than $300,000		$3,000 (minimum fee)
$300,000 - $7,500,000		1.0% of capital cost
$300,000 - $25,000,000		N/A
Greater than $7,500,000		$75,000 (maximum fee)
Greater than $25,000,000		N/A

Your estimated capital cost:	**$1,900,000.00**	x 1.0% =
Permit Application Fee:		**$19,000.00**

VI. Total Fees

Note: fees can be paid together with one payment or as two separate payments.	
Non-Renewal Fee	$19,000.00
Total	$19,000.00

VII. Payment Information

A. Payment One (required)	
Was the fee paid online?	No
Enter the fee amount:	$ 19,000.00
Enter the check, money order, ePay Voucher, or other transaction number:	10722406
Enter the Company name as it appears on the check:	Chevron Phillips Chemical
C. Total Paid	**$19,000.00**

VIII. Professional Engineer Seal Requirement

Is the estimated capital cost of the project above $2 million?	No
Is the application required to be submitted under the seal of a Texas licensed P.E.? Note: an electronic PE seal is acceptable.	No

Pollutant	Does this pollutant require PSD review?	How will you demonstrate that this project meets all applicable requirements?	Notes
Ozone	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.
VOC	No	MERA steps 0-2 AND Modeling (screen or refined)	Attach both an "Electronic Modeling Evaluation Workbook" (EMEW) AND a detailed description of which MERA step was met. Include speciated emission rates with the total VOC and/or PM species corresponding to the short-term and long-term differences represented on the Unit Types-Emission Rates sheet.
PM	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.
PM10	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.
PM2.5	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.
NOx	No	Modeling: screen or refined	Attach a completed "Electronic Modeling Evaluation Workbook" (EMEW).
CO	No	Modeling: screen or refined	Attach a completed "Electronic Modeling Evaluation Workbook" (EMEW).
SO2	No	Modeling: screen or refined	Attach a completed "Electronic Modeling Evaluation Workbook" (EMEW).

Plant Type	Current Tier I BACT	Confirm	Additional Notes

Action Requested	FINs	Unit Type	Pollutant	Current Tier I BACT	Confirm	Additional Notes
New/Modified	P-1792 (F)	Fugitives: Piping and Equipment Leak	VOC	Specify which is applicable: 1. Uncontrolled VOC emissions < 10 tpy: none 2. 10 tpy < uncontrolled VOC emissions < 25 tpy: 28M leak detection and repair program. 75% credit for 28M. 3. Uncontrolled VOC emissions > 25 tpy: 28VHP leak detection and repair program. 97% credit for valves, 85% for pumps and compressors. 4. VOC vp < 0.002 psia: no inspection required, no fugitive emissions expected. For emissions of approved odorous compounds (chlorine, ammonia, hydrogen sulfide, hydrogen cyanide and mercaptans only): AVO inspection twice per shift. Appropriate credit for AVO program.	Yes	see BACT and Nonattainment review sections.
			MSS	Same as normal operation BACT requirements.	Yes	see BACT and Nonattainment review sections.
New/Modified	P-1792	Control: Flare	VOC	VOC: Meets 40 CFR 60.18. Destruction Efficiency: 99% for certain compounds up to three carbons, 98% otherwise. No flaring of halogenated compounds is allowed. Flow monitor required. Composition or BTU analyzer may be required.	Yes	see BACT and Nonattainment review sections.
			NOx	Provide emission factor used and reference.	Yes	See emissions calculations section
			CO	Provide emission factor used and reference.	Yes	See emissions calculations section
			SO2	Provide emission factor used and reference.	Yes	See emissions calculations section
			MSS	Same as normal operation BACT requirements.	Yes	

Texas Commission on Environmental Quality
Form PI-1 General Application
Monitoring

FIN	Unit Type	Pollutant	Minimum Monitoring Requirements	Confirm	Additional Notes for Monitoring
P-1792 (F)	Fugitives: Piping and Equipment Leak	VOC	Use EPA Method 21 to monitor for leaks from seals on pumps, compressors, agitator and valve seals on piping components in light liquid and gas VOC service quarterly. Gas or hydraulic check new and a replaced connectors prior to returning to service, or monitor with Method 21 within 15 days of returning to service. Leak detection and repair (LDAR) Program 28M has a leak definition where repair action is required at 10,000 ppmv. LDAR Program 28 VHP has a leak definition where repair action is required at 500 ppmv for valves and connectors and 2000 ppmv for pumps, compressors and agitators. Check connectors weekly using audio, visual or olfactory (AVO) senses to observe leaks. Record results and corrective action taken.	Yes	Also 28CNTQ for connector monitoring
P-1792	Control: Flare	VOC	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	
		NOx	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	

Texas Commission on Environmental Quality
Form PI-1 General Application
Monitoring

		CO	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	
		SO2	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	

Texas Commission on Environmental Quality
Form PI-1 General Application
Materials

Item	How submitted	Date submitted
A. Administrative Information		
Form PI-1 General Application	STEERS	05/04/2020
Hard copy of the General sheet with original (ink) signature	Mail	05/04/2020
Professional Engineer Seal	STEERS	05/04/2020
B. General Information		
Copy of current permit (both Special Conditions and MAERT)		
Core Data Form		
Area map	STEERS	05/04/2020
Plot plan	STEERS	05/04/2020
Process description	STEERS	05/04/2020
Process flow diagram	STEERS	05/04/2020
List of MSS activities	STEERS	05/04/2020
State regulatory requirements discussion	STEERS	05/04/2020
C. Federal Applicability		
Summary and project emission increase determination - Tables 1F and 2F	STEERS	05/04/2020
Netting analysis (if required) - Tables 3F and 4F as needed	Not applicable	
D. Technical Information		
BACT discussion, if additional details are attached	STEERS	05/04/2020
Monitoring information, if additional details are attached	STEERS	05/04/2020
Material Balance (if applicable)		
Calculations	STEERS	05/04/2020
E. Impacts Analysis		
Qualitative impacts analysis		
MERA analysis	STEERS	05/04/2020
Electronic Modeling Evaluation Workbook: SCREEN3	STEERS	05/04/2020
Electronic Modeling Evaluation Workbook: NonSCREEN3	Not applicable	
PSD modeling protocol		
F. Additional Attachments		

ATTACHMENT 3
COMMENTS ON DRAFT PERMIT

Special Conditions

Permit Numbers 2462C and N294

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit. The annual rates are based on any consecutive 12-month period unless otherwise noted.

2. Upon the startup of the modified facilities and expanded operation as described in Special Condition. No. 3, non-fugitive atmospheric emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions, with exception of rupture discs and relief valves listed in Attachment B to this permit.

3. This permit authorizes modification and expansion of PEU-1792 as described within the permit amendment application, PI-1 dated July 1, 2015 (TCEQ Project No. 238272) and subsequent updates, and the as-built amendment application, PI-1 dated March 31, 2020 (TCEQ Project No. 314315) and subsequent updates. The construction of the project may occur in phases. Each production line constructed to replace an existing production line(s) is a phase. Accordingly, the use of the term "expanded operations" in this permit refers to the phase of the project that has been completed. Commencement of expanded operations is considered to be when an individual line within the unit is modified and placed into service. Within 12 months after completion of construction and commencement of all expanded line operations, the holder of this permit shall submit a permit action to remove or modify Special Conditions and MAERT limits that are applicable only to the pre-expansion configuration through the appropriate permitting mechanism. The action shall provide an explanation for each proposed change. **(08/2020)**

   Expanded operations at any individual line may not commence until the storage silos designated for control and associated with that line are routed to the Regenerative Thermal Oxidizer (RTO) as required in Special Condition No. 13.

Federal Applicability

4. Upon the startup of the modified facilities and expanded operation as described in Special Condition No. 3, these facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):

   A. Subpart A, General Provisions.

   B. Subpart DDD, Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry.

5. Upon the startup of the modified facilities and expanded operation as described in Special Condition No. 3, these facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63: **(08/2020)**

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A. Subpart A, General Provisions.

B. Subpart FFFF, National Emission Standard for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

C. Subpart ZZZZ, National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

D. Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters.

Production

6. Fuel gas combusted at this facility shall be sweet natural gas containing no more than 5 grains of total sulfur per 100 dry standard cubic feet.

7. Prior to the startup of the modified facilities and expanded operation as described in Special Condition No. 3, the total polyethylene production for Train Nos. 1, 2, 3, 4, 5, and 6 shall not exceed 650 million pounds per year, based on a rolling 12-month period. Hourly production for Train Nos. 1-6 shall not exceed 85,000 pounds.

   The ethylene emissions to the atmosphere from the polyethylene pellets, after the extruder and before final loading for Train Nos. 1-6 shall not exceed 78.3 tpy from Emission Point No. (EPN) F-04. The net emissions attributed to Train Nos. 1-6 shall be calculated using the beverage can method or headspace analysis minus the proportion of emissions from Train Nos. 1-6 that are destroyed by control devices.

8. Upon the startup of the modified facilities and commencement of expanded operation as described in Special Condition No. 3, the facility will produce polymers at a rate not to exceed the hourly throughput constraints contained in the Table 2 submitted with the permit amendment application, PI-1 dated July 1, 2015 (TCEQ Project No. 238272) and subsequent updates, and the as-built amendment application, PI-1 dated March 31, 2020 (TCEQ Project No. 314315) and subsequent updates. Production records shall be updated monthly with the pounds of polymer produced during the previous month and rolling 12-months to date. **(08/2020)**

   Total VOC emitted to the atmosphere after the extruder through product loadout includes the Pellet Cap (EPN PELLET), RTO (EPN ROX-1), RTO downtime (EPN ROX-DT), shall not exceed 155.3 pounds of VOC/million (MM) pounds of low density polyethylene pellets on a rolling 12-month basis. **(08/2020)**

   Ongoing compliance with VOC emission limits for the polyethylene pellet handling systems between each extruder and product loadout (inclusive) will be determined monthly based on a summation of Paragraphs A and B of this condition.

   A. Calculated emissions based on stack test results for EPN 1792-35, 1792-36, 1792-37, 1792-38, 1792-39, and 1792-40 plus calculated VOC emissions from EPNs ROX-1 and ROX-DT. **(08/2020)**

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B. Polymer handling pellet fugitive emission losses (EPN F-04) shall be calculated by average head space concentration multiplied by monthly production. VOC sampling for polymer handling pellet fugitive losses (F-04) testing shall occur immediately after the last controlled storage silo. The VOC head space test method shall be capable of determining the total residual concentrations of VOC species having 12 or fewer carbon atoms. The permit holder shall submit a proposed test method for approval to the Executive Director or to the Air Section Manager for the Regional Office within 180 days of issuance of the permit amendment application, PI-1 dated July 1, 2015 and as updated (TCEQ Project No. 238272). Upon approval, a copy of the approved test method shall be retained at the plant site and attached to a copy of the permit. Monthly average sampling will be based on one sample per line per month.

C. Polymer production rates and monitoring records will be maintained at the plant site and shall include (but are not limited to):

(1) Day and time of sample.

(2) Actual plant production rate at the time of sampling and monthly production rate.

(3) Product number.

Flare (EPN 45)

9. The flare X-901 (EPN 45) shall be designed and operated in accordance with the following requirements:

A. The flare system shall be designed such that the combined assist natural gas and waste stream to the flare meets the Title 40 Code of Federal Regulations § 60.18 (40 CFR § 60.18) specifications of minimum heating value and maximum tip velocity at all times when emissions may be vented to it.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate Texas Commission on Environmental Quality (TCEQ) Regional Office to demonstrate compliance with these requirements.

B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame 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. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the use of steam assist to the flare.

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D. Upon the startup of the modified facilities and first production line with expanded operation as described in Special Condition No. 3, the permit holder shall install a continuous flow monitor and composition analyzer system that provide a record of the vent stream flow and composition to the flare. The flow monitoring system shall be capable of measuring the entire gas stream flow to the flare (i.e., all vent gas and supplemental fuel sources) and may consist of one or more flow measurements at one or more header locations. The heating value monitoring system shall be capable of determining the flow-weighted heating value for the entire gas stream to the flare (i.e., all vent gas and supplemental fuel sources) and may consist of one or more sampling locations at one or more header locations. Grab samples taken at least annual or a reference heating value may be used for purchased natural gas in lieu of direct measurement. The flow monitor sensor(s) and analyzer(s) sample point(s) shall be installed in the vent stream(s) as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition (or Btu content) shall be recorded each hour. **(TBD)**

The monitors shall be calibrated or have a calibration check performed on an annual basis to meet the accuracy specifications in 30 TAC § 115.725(d)(1).

Calibration of the analyzer for the HRVOC constituents and the other constituents currently monitored to determine net heating value and molecular weight pursuant to 30 TAC § 115.725(d)(2) shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR §60.18(f)(3) as amended through October 17, 2000 (65 FR 61744).

The monitors and analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a calendar year as specified in 30 TAC 115.725(d)(3). Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR §§60.18(f)(3) and 60.18(f)(4) shall be recorded at least once every hour. Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors within the permit amendment application, PI-1 dated July 1, 2015 and as updated (TCEQ Project No. 238272) or TCEQ Guidance Document factors as appropriate for flare X-901 (EPN 45).

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E. The flare (EPN 45) shall operate in accordance with 40 CFR 63 Subpart FFFF "National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing". Compliance with the requirements of this paragraph shall begin no later than August 12, 2023. Prior to the compliance requirements and schedule of this paragraph, Special Condition Nos. **Error! Reference source not found.**9.A through D shall apply. After the compliance requirements and schedule of this paragraph are met, Special Condition Nos. **Error! Reference source not found.**9.E and 9.F shall apply. **(TBD)**

F. The following requirements apply to capture systems for flare X-901,either:

(1) 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

(2) Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

(3) The capture system shall not have a bypass, or if there is a bypass for the capture system, comply with either of the following requirements:

i. Install a flow indicator that records and verifies zero 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

ii. Once a month, inspect the valves, verifying 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.

(4) Records of the inspections required shall be maintained and if the results of any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

Catalytic Oxidizer (EPN 1792-4B)

10. The Catalytic Oxidizer (EPN 1792-4B) shall have no visible emissions.

11. A continuous emissions monitoring system (CEMS) shall be installed and operated to monitor and record emissions of volatile organic compounds (VOC) in the exhaust stack of the Catalytic Oxidizer (EPN 1792-4B).

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Quality assured (or valid) data must be generated when the oxidizer is operating except during 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 oxidizer operated over the previous rolling 12-month period.

12. Prior to expanded operations as described in Special Condition No. 3, during normal operation, all highly reactive (HRVOC) and/or other organic compound waste gas from existing Storage Bins (V-379, V-380, V-381, and V-382) and from four of the six Blend Silos (M-305, M-306, M-307, and M-308) shall be routed to the Catalytic Oxidizer (EPN 1792-4B).

    The Catalytic Oxidizer (EPN 1792-4B) shall be operated with no less than 95.0 percent efficiency in disposing of the HRVOC from the storage bins. Vent gases from these storage bins shall be routed to a catalytic oxidizer during normal operation. Planned start-up, shutdown, and maintenance operations and emissions are not authorized by this special condition.

Regenerative Thermal Oxidizer (RTO, EPN ROX-1)

13. Upon startup of any modified facilities and expanded operations as described in Special Condition No. 3, the associated vent streams from the controlled storage silos shall be routed to the RTO (EPN ROX-1) which shall maintain the VOC concentration in the exhaust gas less than 10 ppmv on a dry basis, or achieve a VOC destruction efficiency no less than 99 percent. **(08/2020)**

    Emissions to the atmosphere may occur during periods of RTO downtime (EPN ROX-DT) when the firebox exit temperature in Special Condition 14 is not met. The period during which the emissions from EPN ROX-DT shall occur shall not exceed 100 hours on a rolling 12-month basis. Records shall be maintained for at least five years documenting ROX-DT emissions and duration of each occurrence. **(08/2020)**

14. The RTO firebox exit temperature shall be maintained at not less than 1400°F on a six-minute average while waste gas is being fed into the oxidizer prior to initial stack testing. After the initial stack test has been completed, the six minute average temperature shall be equal to, or greater than the respective hourly average (established as the average hourly temperature based on all valid sample runs) maintained during the most recent satisfactory stack testing required by Special Condition No. 17.

    Records shall be maintained for at least five years documenting RTO start-up, shutdown, and duration of each occurrence.

15. The RTO firebox exit temperature shall be continuously monitored and recorded when waste gas is directed to the RTO. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. 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 ±2.5ºC.

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Quality assured (or valid) data must be generated when the RTO is operating as required by Special Condition No. 13 except during calibration. 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 Regenerative Thermal oxidizer operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. **(08/2020)**

After expanded operations, this permit authorizes uncontrolled emissions from EPN ROX-DT (as listed in Attachment A to this permit) due to maintenance of the RTO when production is occurring. Miscellaneous maintenance of the RTO during production shall not exceed 100 hours per year on a rolling 12-month basis (as listed in Attachment A to this permit). Uncontrolled VOC emissions to the atmosphere from EPN ROX-DT due to maintenance of the RTO shall be limited to 85.0 lbs per hour. Emission rates shall be determined using production data and the appropriate emission factors based on the permit amendment application, PI-1 dated March 31, 2020 (TCEQ Project No. 314315) and subsequent updates. Records shall be maintained for at least five years documenting RTO (EPN ROX-DT) emissions and duration of each occurrence. **(08/2020)**

16. The following requirements apply to the capture systems for the RTO.

A. 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

B. Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

C. The bypass for the control device shall comply with either of the following requirements:

(1) Install a flow indicator that records and verifies zero 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

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

D. Records of the inspections required shall be maintained and if the results of any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

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RTO Initial Determination of Compliance

17. 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 the RTO (EPN ROX-1) 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.

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 shall be notified not less than 45 days prior to sampling. 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 from maximum operating rates 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 the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

B. Air contaminants emitted from the RTO (EPN ROX-1) to be tested for include VOC, CO, and NO_x. Additional contaminants to test for may be requested by the appropriate TCEQ Regional Office.

C. Sampling shall occur within 60 days after achieving the maximum operating rate after expanded operation, but no later than 180 days after initial start-up of the facilities (or increase in production, as appropriate) for each completed phase of the project and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.

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D. The facility being sampled shall operate at the maximum achievable operating rate with the regenerative thermal oxidizer temperature recorded during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, the permit holder may operate at a short-term operating rate greater than the rate recorded during the last successful test period provided the new rate does not exceed 105% of the maximum achievable operating rate recorded during the test. The permit holder may operate at this operating rate without additional stack test unless otherwise required by the Executive Director.

During subsequent operations, if the maximum production rates are greater than 105% of that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region. **(08/2020)**

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 EPN ROX-1 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.

Dryer Stack Testing

18. After all expanded operations as defined in Special Condition No. 3, the permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of VOC being emitted into the atmosphere from the Pellet Dryers (EPNs 1792-35, 1792-36, 1792-37, 1792-38, 1792-39, and 1792-40) 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 TCEQ Sampling Procedures Manual and the U.S. EPA Reference Methods. **(08/2020)**

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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 40 CFR Part 60 testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. 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 from maximum operating rates 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 the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

B. Air contaminants emitted from the Pellet Dryers to be tested for include ethylene, propylene, and total VOC. Additional contaminants to test for may be requested by the appropriate TCEQ Regional Office.

C. Sampling shall occur within 60 days after achieving the maximum operating rate of expanded operations, but no later than 180 days after initial start-up of the facilities (or increase in production, as appropriate) for each completed phase of the project and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.

D. The facility being sampled shall operate at maximum operating rate of polyethylene drying during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

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During subsequent operations, the permit holder may operate at a short-term operating rate greater than the rate recorded during the last successful test period provided the new rate does not exceed 105% of the maximum operating rate recorded during the test. The permit holder may operate at this operating rate without additional stack test unless otherwise required by the Executive Director.

During subsequent operations, if the maximum production rates are greater than 105% of that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region. **(08/2020)**

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 shall be incorporated into the design of the Pellet Dryers constructed after calendar year 2017 according to the specifications set forth in the attachment entitled "Chapter 2, Guidelines For Stack Sampling Facilities" of the TCEQ Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.

VOC Storage and Loading

19. Tanks FIN TK-902 (EPN 03), TK-402 (EPN 28), TK-401 (EPN 29) V-912 (EPN 1792-11), Tank TK-903 (EPN 1792-47) service is limited to storing VOC with a vapor pressure less than 0.5 psia. **(08/2020)**

20. After commencement of expanded operation as described in Special Condition No. 3, tanks are subject to the following requirements:

A. 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 or utilize bottom fill.

B. 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, 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.

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Emissions from tanks shall be calculated using the AP-42 methods that were used to determine the MAERT limits in the permit amendment application, PI-1 July 1, 2015. Sample calculations from the application shall either be attached to a copy of this permit at the plant site or maintained and available upon request.

21. Diesel Fuel tanks V-905 (EPN 1792-42) and V-930 (EPN 1792-44) shall be exempt from Special Condition No. 20.A.

22. The permit holder shall not allow visible emissions resulting from loading or unloading of the Storage Tanks identified as EPNs 28, 29, 1792-11, F-05, 1792-44, 1792-45, and 1792-48.

23. Visible emissions, except uncombined water, to the atmosphere shall not exceed 5.0 percent opacity in any five-minute period from any point or fugitive source associated with the Storage Tanks identified as EPNs 30 and 3.

24. After commencement of expanded operations of the first production line as described in Special Condition No. 3, the permit holder shall maintain and update a monthly emissions record which includes calculated emissions of VOC from all liquid 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.”

25. After commencement of expanded operations of the first production line as described in Special Condition No. 3, all liquid loading lines and connectors shall be visually inspected for any defects prior to hookup. Lines and connectors that are visibly damaged shall be removed from service. Operations shall cease immediately upon detection of any liquid leaking from the lines or connections.

26. Slop Oil Loading at EPN LL03 shall be submerged fill or utilize bottom fill and rolling 12 month rack throughput records shall be updated on a monthly basis for each product loaded.

Baghouse/Filters

27. Particulate matter emissions shall not exceed 0.01 grain per dry standard cubic foot (dscf) of air from any vent. There shall be no visible emissions exceeding 30 seconds in any six-minute period as determined using U. S. EPA Test Method 22. **(08/2020)**

    The vents covered by this permit shall not operate unless control devices and associated equipment are maintained in good working order and operating. All vents will be inspected for visible emissions once per day and a spare-parts filter inventory will be maintained on site. Records shall be maintained of all inspections and maintenance performed.

Engine (EPN 1792-43)

28. The permit holder shall maintain a record to demonstrate that routine operation of the engine associated with EPN 1792-43 does not exceed 82 hours per year, on a rolling 12-month basis.

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Cooling Tower (EPN 1792-76)

29. The cooling towers (EPN 1792-76) shall be operated and monitored in accordance with the following: **(08/2020)**

    A. The VOC associated with cooling towers (EPN 1792-76) water shall be monitored weekly with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. The results of the monitoring, cooling water flow rate and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12-month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12 month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the 2 VOC monitored results.

    B. In lieu of Paragraph A, a continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw may be installed. The sampling system for the continuous on-line monitoring system must be demonstrated equivalent to the air-stripping apparatus used in Appendix P for determining strippable HRVOC concentrations in the water as specified in 30 TAC § 115.764(f). The continuous on-line monitor system must satisfy the requirements of Sections 8.3, 10, 13.1, and 13.2 of 40 Code of Federal Regulations (CFR) Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744). The multi-point calibration procedure in Section 10.1 of Performance Specification 9 must be performed at least once every calendar quarter instead of once every month. The online monitoring system must be operated as required at least 95% of the time when the cooling tower is operational, averaged over a rolling 12-month period. During out-of-order periods of the on-line HRVOC monitor(s) of 24 hours or greater, sampling must be performed for total and speciated HRVOC analysis according to the air-stripping method in Appendix P. Sampling must be performed at least three times per calendar week, with an interval of no less than 36 hours between sampling times, until the continuous on-line monitor is properly operating and within the required performance specifications.

    C. The cooling tower shall be equipped with drift eliminators having manufacturer's design assurance of 0.0005% drift or less. Drifts eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs. **(08/2020)**

    D. Total dissolved solids (TDS) shall not exceed 3,500 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. **(08/2020)**

    E. The cooling water (EPN 1792-76) shall be sampled at least once per week for TDS. **(08/2020)**

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

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

(3) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained. If testing is done by an outside lab, instrument calibration records are not required.

G. Emission rates of PM, PM_{10} and $PM_{2.5}$ shall be calculated using the measured TDS, 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.

Fugitives

30. Piping, Valves, Connectors, Flanges, Pumps and Compressors in VOC Service – 28RCT

Prior to expanded operations, the following requirements apply to the facilities that are in the scope of this permit.

A. These conditions shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure equal to or 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 to be made available upon request.

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.

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. Non-accessible 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.

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E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled quarterly monitoring after initial installation or replacement, all new or reworked connections shall be gas-tested or hydraulically-tested at no less than normal operating pressure and adjustments 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 a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed.

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.

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.

An approved gas analyzer shall conform to requirements listed in 40 CFR § 60.485(a) - (b).

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 and compressor 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 connectors 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 and compressor seals found to be emitting VOC in excess of 10,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired.

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I. Every reasonable effort shall be made to repair a leaking component, as specified in this paragraph, within 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. At the discretion of the TCEQ Executive Director or designated representative, early unit shutdown or other appropriate action may be required based on the number and severity of tagged leaks awaiting shutdown.

J. The results of the required fugitive instrument monitoring and maintenance program shall be made available to the TCEQ Executive Director or designated representative upon request. Records shall indicate appropriate dates, test methods, instrument readings, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of physical inspections are not required unless a leak is detected.

K. Fugitive emission monitoring required by 30 TAC Chapter 115 may be used in lieu of Items F through I of this condition.

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

31. Piping, Valves, Connectors, Pumps, Agitators, and Compressors in VOC Service - 28VHP

After commencement of expanded operations of the first production line as described in Special Condition No. 3, 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 Volatile Organic Compound (VOC) has an aggregate partial pressure or vapor pressure of less than 0.044 pounds 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.

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.

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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. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph 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 within the 72-hour 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.

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F. Within six months following expanded operations of the first production line, 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 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.

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

G. Within six months following expanded operations of the first production line, 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 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 connectors 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.

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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 - 115.359 or 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.

Connectors in VOC Service Inspected Quarterly - (28CNTQ)

32. The following requirements also apply to the facilities that are in the scope of this permit.

A. In addition to the weekly physical inspection required by Item E of Special Condition Nos. 30 and 31, all accessible connectors in gas/vapor and light liquid service shall be monitored quarterly with an approved gas analyzer in accordance with Items F through J of Special Condition Nos. 30 and 31.

B. Allowance for reduced monitoring frequencies.

(1) The frequency of monitoring may be reduced from quarterly to semiannually if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

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(2) The frequency of monitoring may be reduced from semiannually to annually if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

C. If the percent of connectors 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.

D. The percent of connectors leaking used in paragraph B shall be determined using the following formula:

$$(Cl + Cs) \times 100/Ct = Cp$$

Where:

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

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

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

Cp = the percentage of leaking connectors for the monitoring period.

Planned Maintenance, Startup, and Shutdown (MSS)

33. Prior to expanded operations, this permit authorizes maintenance emissions from EPN 1792-4M when production is occurring. Maintenance activities during production shall not exceed 480 hours per year on a rolling 12-month basis. Polyethylene production shall not exceed 85,000 lbs in any 60-minute period during maintenance operations. The 480 hours of maintenance, startup, and shutdown activities related to EPN 1792-4M are shown in Attachment A to this permit.

34. This permit authorizes emissions from the Flare X-901 (EPN 45) for the following maintenance, start-up, and shutdown activities from polyethylene lines one through six and the purification process for reactor purges, compressor purges, high pressure pump purges, hopper venting, and pump venting from polyethylene lines one through six and purification process. Emissions are limited to the hourly and annual limits in the attached table entitled “Emission Sources - Maximum Allowable Emission Rates.”

These emissions are subject to the maximum allowable emission rates indicated on the MAERT. Any start-up, shutdown, and maintenance activities not in the above list are not authorized by this permit. The permit holder shall maintain a record to demonstrate that start-up, shutdown, and maintenance operations associated with each EPN demonstrate compliance. These records shall be kept at the plant demonstrating compliance with this representation for the last five years.

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Testing

35. Prior to expanded operations of a production line the pellet fugitives shall be tested quarterly using the beverage can test or headspace analysis after the pellets exit the dryer.

Recordkeeping

36. The records required by this special condition 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. These records shall be made immediately available at the request of personnel from the TCEQ or any air pollution control agency with jurisdiction.

    A. The hourly and annual production from Train Nos. 1-6 as required in Special Condition Nos. 7 and 8.

    B. The monthly or quarterly beverage can test results or headspace analysis test results and the calculations demonstrating the emissions from Train Nos. 1-6 polyethylene pellets as required in Special Condition Nos. 8 and 35.

    C. The analysis results from the cooling tower tests and the identified heat exchanger leaks as required by Special Condition No. 29.

    D. Records to demonstrate compliance with fugitive Special Condition Nos. 30, 31 and 32.

    E. The flare pilot records as required in Special Condition No. 9.

    F. CEMS records as required in Special Condition No. 11.

    G. Temperature records as required in Special Condition No. 15.

    H. Engine records to demonstrate compliance with Special Condition No. 28. **(08/2020)**

Offsets – 2020 Flare Amendment (TCEQ Project No. 315800)

37. This Nonattainment (NNSR) permit is issued/approved based on the requirement that the permit holder offset the project emission increase for facilities authorized by NSR Permit Nos. 1504A, 2462C, 37063, 19027, and 46305 prior to the commencement of operation, through participation in the TCEQ Emission Banking and Trading (EBT) Program in accordance with the rules in 30 TAC Chapter 101, Subchapter H. **(TBD)**

    A. The permit holder shall use ~~18.7~~19.1 tpy of NOx credits to offset the 15.~~54~~ 84 tpy NOx project emission increase for the facilities authorized by this permit at a ratio of 1.2 to 1.0

    B. Prior to the commencement of operation, the permit holder shall obtain approval from the TCEQ EBT Program for the credits being used and then submit a permit alteration or amendment request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify approved credits by TCEQ credit certificate number.

Commented [JMG1]: Updated due to change in emission rate in Permit 46305

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Permits by Rule (PBRs)

38. The following sources and/or activities are authorized under a PBR. This list is not intended to be all-inclusive and can be altered without modifications to this permit.

Authorization	Source or Activity
Unregistered PBR under Standard Exemption 106, as issued on March 14, 1997.	Particulate Matter from the Baghouses Emission Point Numbers (EPNs) 1792-24 and 1792-25, Facility Identification Numbers (FINs) F-190, F-191, and F-192.

Date: TBD

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ATTACHMENT A

Permit Number 2462C and N294

Maintenance Activities Authorized for a Rolling 12-Month Period

Maintenance Descriptions

Maintenance and testing for analyzers and related equipment

Maintenance for blowers and related equipment

Maintenance for feeders and related equipment

Maintenance for filters and related equipment

Maintenance for filter guards and related equipment

Maintenance for fuel gas PSV and related equipment

Filter fluff removal

Catalyst replacement

Heat exchanger inspection

Miscellaneous maintenance for systems and equipment routed to EPN 1792-4B (H-3030 Catalytic Oxidizer) - Before Expansion

Miscellaneous maintenance on H-3030 Catalytic Oxidizer not to exceed 480 hrs/yr (EPN 1792-4M) – Before Expansion

Miscellaneous maintenance for systems and equipment routed to EPN ROX-1 and maintenance on EPN ROX-1 (Regenerative Thermal Oxidizer) identified as ROX-DT not to exceed 100 hrs/yr – After Expansion

Date: August 20, 2020

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ATTACHMENT B

Permit Number 2462C and N294

Atmospheric Safety Devices with Potential for >1% VOC Gases

Excepted Relief Device per Special Condition 2					
PSE-101	PSE-125	PSV-150	PSE-358B	PSE-1507	PSV-1631
PSE-102	PSE-126	PSE-175	PSV-440	PSE-1508	PSE (F-3031)
PSE-103	PSE-127	PSV-351	PSV-441	PSE-1510	PSE-3031A
PSE-104	PSE-128	PSE-351A	PSV-442	PSE-1511	PSE-3031B
PSE-105	PSE-129	PSE-351B	PSV-443	PSE-1512	PSV-3464
PSE-106	PSE-130	PSV-352	PSV-904	PSE-1523A	PSE-3464A
PSE-107	PSE-131	PSE-352A	PSV-911	PSE-1523B	PSE-3464B
PSE-108	PSE-132	PSE-352B	PSV-912	PSV-1531	PSV-3465
PSE-109	PSE-133	PSV-353	PSV-929	PSE-1560	PSE-3465A
PSV-109B	PSE-134	PSE-353A	PSV-1001	PSE-1561	PSE-3465B
PSE-110	PSE-135	PSE-353B	PSV-1002	PSE-1562	PSV-3466
PSE-111	PSE-136	PSV-354	PSV-1003	PSE-1601	PSE-3466A
PSV-111	PSE-137	PSE-354A	PSV-1004	PSE-1602	PSE-3466B
PSE-112	PSE-138	PSE-354B	PSE-1105	PSE-1603	PSV-3467
PSE-113	PSE-139	PSV-355	PSE-1106	PSE-1604	PSE-3467A
PSE-114	PSE-140	PSE-355A	PSE-1107	PSE-1605	PSE-3467B
PSE-115	PSE-141	PSE-355B	PSE-1108	PSE-1606	PSV-4732
PSE-116	PSE-142	PSV-356	PSE-1170	PSE-1607	PSV-4712
PSE-117	PSE-143	PSE-356A	PSE-1177	PSE-1608	PSE-10190
PSE-118	PSE-144	PSE-356B	PSE-1501	PSE-1610	PSE-10191
PSE-119	PSE-145	PSV-357	PSE-1502	PSE-1611	PSE-10192
PSE-120	PSE-146	PSE-357A	PSE-1503	PSE-1612	PSE-11019
PSE-121	PSE-147	PSE-357B	PSE-1504	PSE-1624	PSE-12019
PSE-122	PSE-148	PSV-358	PSE-1505	PSE-1625	PSE-13019
PSE-123	PSE-149	PSE-358A	PSE-1506	PSE-1626	PSE-14019
PSE-124	PSE-150	PSE-0014			

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The following list of excepted relief devices were installed prior to expanded operation as described in Special Condition No. 3; TCEQ Air Permit Division review shall apply to move the device to the previous exemption list if the relief device is modified.

Excepted Relief Device per Special Condition 2					
PSV-117	PSE-165	PSV-191B	PSV-1068	PSV-1539B	PSV-4686B
PSV-136A	PSE (V-166)	PSV-428A	PSV-1504	PSE-1557	PSV-4687A
PSV-159A	PSE-166	PSV-428B	PSV-1508A	PSV-1557	PSV-4687B
PSV-159B	PSE-169A	PSV-444	PSV-1508B	PSE-1558	PSV-4691A
PSV-160A	PSE-169B	PSV-801	PSV-1509A	PSE-1559	PSV-4691B
PSV-160B	PSV-173	PSV-803	PSV-1509B	PSV-1604	PSV-4742
PSV-161A	PSV-174	PSV-903A	PSV-1510	PSV-1608A	PSV-7110
PSV-161B	PSE-186	PSV-903B	PSE-1517A	PSV-1608B	PSE-10127
PSV-162	PSV-187	PSV-907	PSE-1517B	PSV-1609A	PSE-10132
PSE (V-163)	PSE-190	PSV-931A	PSE-1522	PSV-1609B	PSV-10139
PSE-163	PSV-190A	PSV-931B	PSV-1538A	PSV-1610	PSV-10140
PSE (V-164)	PSV-190B	PSV-1007	PSV-1538B	PSE-1622	PSE-15101
PSE-164	PSV-191A	PSV-1067	PSV-1539A	PSV-4686A	PSE-16101
PSE (V-165)					

Date: August 20, 2020

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Any request for portions of this application that are marked as confidential must be submitted in writing, pursuant to the Public Information Act, to the Texas Commission on Environmental Quality Public Information Coordinator, MC-197, P.O. Box 13087, Austin, Texas 78711-3087.

July 2, 2020

Ms. Ariel Ramirez
Texas Commission on Environmental Quality
Air Permits Division (MC-163)
P.O. Box 13087
Austin, Texas 78711-3087

EMAILED

Re: Chevron Phillips Chemical Company LP
Cedar Bayou Plant
Permit No. 2462C Amendment
Baytown, Harris County
Regulated Entity Number RN103919817
Customer Reference Number CN600303614

Dear Ms. Ramirez:

On behalf of Chevron Phillips Chemical, LLC I am submitting the enclosed response to your letter dated June 2, 2020 with respect to our pending amendment application for the above referenced permit. Detailed responses for each of the items you requested are included in the following attachments.

Attachment 1: Detailed Responses to June 2, 2020 – Additional Information Request Letter

Attachment 2: Updated Non-Confidential Application Materials

Attachment 3: Updated Air Permit Application Workbook (also provided electronically)

Should you have any questions regarding this matter, please contact Mr. Oluwatobi 'Tobi' Adeyinka at (281) 421-6285.

Sincerely,

Jason M. Graves
Principal Engineer

JG/av

Enclosures

cc: Air Program Manager, Region 12, TCEQ, Houston, w/ enclosures
Director, Harris County Public Health and Environmental Services, Pasadena, w/ enclosures

ATTACHMENT 1
RESPONSES TO QUESTIONS

The information in this attachment is in response to the letter dated June 2, 2020. The questions appear below in bold font, followed by CPChem's response.

1. ***General:*** **Please ensure the updated workbook includes the Nonattainment permit no. N294 as it has been assigned since the initial application.**

   CPChem Response:

   The assigned nonattainment permit number has been added to the workbook per your request.

2. ***General, Section VI.H*****: The workbook indicates that a material balance (TCEQ Table 2) has not been provided. We require a material balance representation for all applications to confirm technical emissions information. The permit reviewer will evaluate the project based on a total material balance; that is, all streams into the system and all streams out, Table 2 is adequate for most process material balances, and additional sheets may be attached if necessary. Complex material balances may be presented on spreadsheets or indicated using process flow diagrams. All materials in the process should be addressed whether or not they directly result in the emission of an air contaminant. All production rates must be based on maximum operating conditions. All data submitted in the Table 2 are enforceable representations. Please submit a material balance (Table 2) to facilitate our review and recordkeeping.**

   CPChem Response:

   This project does not propose any changes to unit production rates, so no updates to the Table 2 material balance are being made. The previously submitted Table 2 material balance remains accurate. A copy of this material balance is available in the confidential files for the prior permit amendment.

3. ***Technical, Section VIII.C:*** **It is noted that this tab does not list applicability to 40 CFR Part 63 Subparts SS and UU, while the current Special Conditions do. Please verify whether 40 CFR 63 Subparts SS and UU are still applicable to the site. If they are, please update the NSR workbook to list all applicable subparts. If they are not, please clarify why these subparts are no longer applicable so that the Special Conditions may be updated accordingly.**

   CPChem Response:

   The air permit application workbook has been updated to ensure that these subparts are included.

4. ***Unit Types-Emission Rates, Column B*: Please update this column to reflect 'Yes' to include all emissions in annual (tpy) summary tab. These values should be included whether the EPNs are being modified or not so that the *Public Notice* tab of the workbook can correctly populate. As indicated by instruction no. 2.b of this tab, you may select 'no' if the emissions are part of a cap that is listed separately, or if there are multiple operating scenarios being represented.**

   CPChem Response:

   The air permit application workbook has been updated in column B of the *Unit Types-Emission Rates* tab to reflect "Yes" for all responses except for the secondary operating scenario for the flare to keep emissions increases from being double counted.

5. ***Unit Types-Emission Rates, EPN 45 (X-901 Flare Operations (9)*: It appears that the workbook reflects incorrect 'current' rates for columns G and H. When comparing to the current authorized MAERT, it shows the current rates equivalent to those shown with footnote (8) instead of footnote (9). The proposed emissions are also equivalent to those that have been proposed for the rates associated with footnote (8). Please verify that this is a correct representation and not just a copy/past issue within the workbook.**

   CPChem Response:

   The air permit application workbook has been updated to show each scenario with its own currently authorized emission rate limits according to the rates listed in the current issued permit. Please note that an as-built amendment for that permit is being processed concurrently which will set the rates for footnote (8) and (9) to be the same, equal to footnote (8), which was the basis for our initial submittal.

6. ***Public Notice*: Once item 4 is addressed, note that this will be updated to reflect accurate current rates. Similarly, once item 5 is addressed, note that the final proposed values may change.**

   CPChem Response:

   The air permit application workbook has been updated to reflect these changes. Since this is a nonattainment permit amendment, it does not change the outcome of public notice for the project.

7. ***BACT- Fugitives*: The application represents that fugitive emissions will be monitored under the existing 28VHP LDAR program. Please note that as this project triggered Nonattainment, the 28LAER program should be utilized in order to meet LAER. Note that 28LAER would only have to be applied to those individual components that are subject to LAER (i.e., those being modified/added as part of this project) rather than all the components included in the EPN. Please 1) update the emissions calculations, workbook, federal applicability analysis, and modeling to reflect 28LAER for those components which are subject to it; and 2) clarify how Chevron proposes to distinguish those**

components which are subject to 28VHP vs those subject to 28LAER. Typically, this is done by breaking out the components subject to LAER into a separate EPN.

CPChem Response:

This project triggers nonattainment only for NOx emissions. Project emissions increases of VOCs are less than 5 TPY, and therefore do not trigger netting or nonattainment review. Since the project is not subject to nonattainment for VOCs, the fugitive emissions increases for VOCs are not subject to LAER and are only subject to BACT. Only emissions increases of NOx are subject to LAER for this project.

8. ***Federal Applicability*: The submitted application indicates that netting is required for the nonattainment analysis for this project, yet table 3F's were not provided. Please provide TCEQ Table 3F's (and Table 4F's if any reductions are claimed within the netting window) as required. Additionally, please note that calculating the PI based on the incremental increase is okay, but modifying the TCEQ Table 2F's to say 'incremental increases only' are not what's typically submitted. For an incremental approach, applicants typically leave the baseline column blank. Please ensure that the Federal Applicability analysis is completed in accordance with APDG5881 (September 2019) and that all appropriate tables are included. a. *Federal Applicability – workbook:* This tab indicates that ERCs will be utilized for offsets. Please clarify whether the ERCs have already been issued and if so, please provide the TCEQ Emissions Banking and Trading Project Number or Certificate Number to verify where the credits have come from.**

CPChem Response:

As shown on the Table 1F, the contemporaneous changes are identified as being greater than 25 TPY for NOx, thus triggering nonattainment for that pollutant. This is based on knowledge of past projects at the site which would demonstrate that the project will be unable to net out of nonattainment. Since CPChem has stipulated that nonattainment permitting does apply and plans to offset only the project increases shown on the Table 2F, submittal of contemporaneous netting is not necessary. There are no requirements that would change as a result of the contemporaneous netting (unlike PSD projects which may require increment or contemporaneous modeling demonstrations). This approach has been followed for a number of recent Chevron Phillips Cedar Bayou Plant Nonattainment permitting projects, including Project Numbers 189863 and 240430.

The NOx ERCs that will be consumed for this project have been issued but are not currently held in a certificate in Chevron Phillips portfolio. Since they will likely be assigned a new certificate number upon transfer, we will provide the certificate number closer to permit issuance.

9. ***AMOCs*: Please clarify whether Chevron has submitted an AMOC for this flare amendment. If not, AMOCs can be submitted by sending a letter for the site describing the Chapter 115 issue, describing the flare, covering a few AMOC requirements in 115, and referencing the technical information in the permit application. Anne Inman is our AMOC person and she would be more than happy to answer any questions you may have (anne.inman@tceq.texas.gov) as she has already issued some AMOCs for other facilities that have come in for flare amendments related to the upcoming amendments by EPA to**

40 CFR Part 63, Subpart YY National Emission Standards for Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations (EMACT).

CPChem Response:

An AMOC is not being requested at this time, as the flare will continue to comply with the applicable federal standards in addition to ensuring that the flare will also follow additional guidelines for NHVcz. If a need for an AMOC is identified, CPChem will submit a request for an AMOC as appropriate.

ADDITIONAL APPLICATION UPDATES

In addition to addressing your specific questions, an error in the total emission rates shown for SO_2 emission rates on the summary table and in the air permit application work has been identified. The totals have been corrected in the updated workbook, and the affected application pages have been updated and included in Attachment 2 to this letter. The underlying emission calculations are not changed, simply the totals shown in the summary and the Table 2F for SO_2.

ATTACHMENT 2

UPDATES TO NON-CONFIDENTIAL APPLICATION

DETAILED EMISSION SUMMARY

EPN	FIN	Description	CO						SO_2					
			Previous Authorization		Proposed Authorization		Increase/Decrease		Previous Authorization		Proposed Authorization		Increase/Decrease	
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
F-75	P-1792	Process Fugitives												
45	P-1792	X-901 Flare Operation	72.45	19.92	80.59	53.41	8.14	33.49	0.04	0.03	0.45	0.84	0.41	0.81
		TOTAL RATES:				**53.41**		**33.49**				**0.84**		**0.81**

TABLE 2F
PROJECT EMISSIONS INCREASE

Pollutant [1]:	SO2	**Permit:**	Various
Baseline Period:	Incremental Increases	**to**	

	Affected or Modified Facilities [2]		Permit	Actual Emissions [3]	Baseline Emissions [4]	Proposed Emissions [5]	Projected Actual Emissions	Difference (A-B) [5]	Correction [7]	Project Increase [8]
	FIN	EPN	NO.	(tons/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(tons/yr)
				B		A				
1	CB-710	1592-40	1504A	Incremental Inceases Only		0.141		0.141		0.141
2	FS-541-0	1796-10A	19027	Incremental Inceases Only		0.213		0.213		0.213
3	FS-9004	1799-20	46305	Incremental Inceases Only		0.013		0.013		0.013
4	P-1792	45	2462C	Incremental Inceases Only		0.840		0.840		0.840
5	Z-101	110	37063	Incremental Inceases Only		0.645		0.645		0.645
6	Z-1101	1798-22	37063	Incremental Inceases Only		0.334		0.334		0.334
7	Z-251	129	37063	Incremental Inceases Only		0.587		0.587		0.587
8										
9										
10										
11										
12										
13										
14										
							PAGE SUBTOTAL: [9]			2.77
								Total		2.77

ATTACHMENT 3

UPDATED AIR PERMIT APPLICATION WORKBOOK

I. Applicant Information	
I acknowledge that I am submitting an authorized TCEQ application workbook and any necessary attachments. Except for inputting the requested data and adjusting row height and column width, I have not changed the TCEQ application workbook in any way, including but not limited to changing formulas, formatting, content, or protections.	I agree

A. Company Information

Company or Legal Name:	Chevron Phillips Chemical Company LP

Permits are issued to either the facility owner or operator, commonly referred to as the applicant or permit holder. List the legal name of the company, corporation, partnership, or person who is applying for the permit. We will verify the legal name with the Texas Secretary of State at (512) 463-5555 or at:

https://www.sos.state.tx.us

Texas Secretary of State Charter/Registration Number (if given):	

B. Company Official Contact Information: must not be a consultant

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Gregory
Last Name:	Goodson
Title:	Environmental Superintendent
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6879
Fax Number:	
Email Address:	cedraenviron@cpchem.com; GOODSGA@cpchem.com

C. Technical Contact Information: This person must have the authority to make binding agreements and representations on behalf of the applicant and may be a consultant. **Additional technical contact(s) can be provided in a cover letter.**

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Oluwatobi
Last Name:	Adeyinka
Title:	Environmental Engineer
Company or Legal Name:	Chevron Phillips Chemical LP
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6285
Fax Number:	
Email Address:	ADEYIO@cpchem.com

D. Assigned Numbers

The CN and RN below are assigned when a Core Data Form is initially submitted to the Central Registry. The RN is also assigned if the agency has conducted an investigation or if the agency has issued an enforcement action. If these numbers have not yet been assigned, leave these questions blank and include a Core Data Form with your application submittal. See Section VI.B. below for additional information.

Enter the CN. The CN is a unique number given to each business, governmental body, association, individual, or other entity that owns, operates, is responsible for, or is affiliated with a regulated entity.	CN600303614
Enter the RN. The RN is a unique agency assigned number given to each person, organization, place, or thing that is of environmental interest to us and where regulated activities will occur. The RN replaces existing air account numbers. The RN for portable units is assigned to the unit itself, and that same RN should be used when applying for authorization at a different location.	RN103919817

II. Delinquent Fees and Penalties

Does the applicant have unpaid delinquent fees and/or penalties owed to the TCEQ? This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ Web site at: https://www.tceq.texas.gov/agency/financial/fees/delin	No

III. Permit Information

A. Permit and Action Type **(multiple may be selected, leave no blanks)**

Additional information regarding the different NSR authorizations can be found at:
https://www.tceq.texas.gov/permitting/air/guidance/authorize.html

Select from the drop-down the type of action being requested for each permit type. **If that permit type does not apply, you MUST select "Not applicable".**

Provide all assigned permit numbers relevant for the project. Leave blank if the permit number has not yet been assigned.

Permit Type	**Action Type Requested** **(do not leave blank)**	**Permit Number (if assigned)**
Minor NSR (can be a Title V major source): *Not applicable, Initial, Amendment, Renewal, Renewal Certification, Renewal/Amendment, Relocation/Alteration, Change of Location, Alteration, Extension to Start of Construction*	Amendment	2462C
Special Permit: *Not applicable, Amendment, Renewal, Renewal Certification, Renewal/Amendment, Alteration, Extension to Start of Construction*	Not applicable	
De Minimis: *Not applicable, Initial*	Not applicable	
Flexible: *Not applicable, Initial, Amendment, Renewal, Renewal Certification, Renewal/Amendment, Alteration, Extension to Start of Construction*	Not applicable	
PSD: *Not applicable, Initial, Major Modification*	Not applicable	
Nonattainment: *Not applicable, Initial, Major Modification*	Initial	N294
HAP Major Source [FCAA § 112(g)]: *Not applicable, Initial, Major Modification*	Not applicable	

PAL: *Not applicable, Initial, Amendment, Renewal, Renewal/Amendment, Alteration*	Not applicable	
GHG PSD: *Not applicable, Initial, Major Modification, Voluntary Update*	Not applicable	

B. MSS Activities

How are/will MSS activities for sources associated with this project be authorized?	This permit

C. Consolidating NSR Permits

Will this permit be consolidated into another NSR permit with this action?	No
Will NSR permits be consolidated into this permit with this action?	No

D. Incorporation of Standard Permits, Standard Exemptions, and/or Permits By Rule (PBR)

To ensure protectiveness, previously issued authorizations (standard permits, standard exemptions, or PBRs) including those for MSS, are incorporated into a permit either by consolidation or by reference. At the time of renewal and/or amendment, consolidation (in some cases) may be voluntary and referencing is mandatory.More guidance regarding incorporation can be found in 30 TAC § 116.116(d)(2), 30 TAC § 116.615(3) and in this memo:

https://www.tceq.texas.gov/assets/public/permitting/air/memos/pbr_spc06.pdf

Are there any standard permits, standard exemptions, or PBRs to be incorporated by reference?	No
Are there any PBR, standard exemptions, or standard permits associated to be incorporated by consolidation? **Note:** Emission calculations, a BACT analysis, and an impacts analysis must be attached to this application at the time of submittal for any authorization to be incorporated by consolidation.	No

E. Associated Federal Operating Permits	
Is this facility located at a site required to obtain a **site operating permit (SOP)** or **general operating permit (GOP)?**	Yes
Is a **SOP** or **GOP** review pending for this source, area, or site?	Yes
If required to obtain a **SOP** or **GOP**, list all associated permit number(s). If no associated permit number has been assigned yet, enter "TBD":	O2115

IV. Facility Location and General Information	
A. Location	
County: Enter the county where the facility is physically located.	Harris
TCEQ Region	Region 12
County attainment status as of Sept. 23, 2019	Serious Ozone nonattainment
Street Address:	9500 I-10 East
City: If the address is not located in a city, then enter the city or town closest to the facility, even if it is not in the same county as the facility.	Baytown
ZIP Code: Include the ZIP Code of the physical facility site, not the ZIP Code of the applicant's mailing address.	77521
Site Location Description: If there is no street address, provide written driving directions to the site. Identify the location by distance and direction from well-known landmarks such as major highway intersections.	
Use USGS maps, county maps prepared by the Texas Department of Transportation, or an online software application such as Google Earth to find the latitude and longitude.	
Latitude (in degrees, minutes, and nearest second (DDD:MM:SS)) for the street address or the destination point of the driving directions. Latitude is the angular distance of a location north of the equator and will always be between 25 and 37 degrees north (N) in Texas.	29°49'03"N
Longitude (in degrees, minutes, and nearest second (DDD:MM:SS)) for the street address or the destination point of the driving directions. Longitude is the angular distance of a location west of the prime meridian and will always be between 93 and 107 degrees west (W) in Texas.	94°56'02"W
Is this a project for a lead smelter, concrete crushing facility, and/or a hazardous waste management facility?	No
B. General Information	
Site Name:	Cedar Bayou Plant
Area Name: Must indicate the general type of operation, process, equipment or facility. Include numerical designations, if appropriate. Examples are Sulfuric Acid Plant and No. 5 Steam Boiler. Vague names such as Chemical Plant are not acceptable.	Polyethylene Unit PEU-1792 Flare X-901

Are there any schools located within 3,000 feet of the site boundary?	No
C. Portable Facility	
Permanent or portable facility?	Permanent
D. Industry Type	
Principal Company Product/Business:	Organic Chemical Manufacturing
A list of SIC codes can be found at: https://www.naics.com/sic-codes-industry-drilldown/	
Principal SIC code:	2869
NAICS codes and conversions between NAICS and SIC Codes are available at: https://www.census.gov/eos/www/naics/	
Principal NAICS code:	325110
E. State Senator and Representative for this site	
This information can be found at (note, the website is not compatible to Internet Explorer): https://wrm.capitol.texas.gov/	
State Senator:	Brandon Creighton
District:	4
State Representative:	Briscoe Cain
District:	128

V. Project Information	
A. Description	
Provide a brief description of the project that is requested. (Limited to 500 characters).	This amendment authorizes changes to flare process monitoring and controls to optimize the addition of steam/air and supplemental natural gas which will support continued maintenance of the required net heating value in the combustion zone.
B. Project Timing	
Authorization must be obtained for many projects before beginning construction. Construction is broadly interpreted as anything other than site clearance or site preparation. Enter the date as "Month Date, Year" (e.g. July 4, 1776).	
Projected Start of Construction:	March 17, 2021
Projected Start of Operation:	June 15, 2021
C. Enforcement Projects	
Is this application in response to, or related to, an agency investigation, notice of violation, or enforcement action?	No
D. Operating Schedule	
Will sources in this project be authorized to operate 8760 hours per year?	Yes

VI. Application Materials	
All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. (30 TAC § 116.116)	
A. Confidential Application Materials	
Is confidential information submitted with this application?	Yes
If yes, is each confidential page marked "CONFIDENTIAL" in large red letters?	Yes
THSC §382.041 requires us not to disclose any information related to manufacturing processes that is marked Confidential. Mark any information related to secret or proprietary processes or methods of manufacture Confidential if you do not want this information in the public file. All confidential information should be separated from the application and submitted as a separate file. Additional information regarding confidential information can be found at: https://www.tceq.texas.gov/permitting/air/confidential.html	
B. Is the Core Data Form (Form 10400) attached?	No
https://www.tceq.texas.gov/assets/public/permitting/centralregistry/10400.docx	
C. Is a current area map attached?	Yes
Is the area map a current map with a true north arrow, an accurate scale, the entire plant property, the location of the property relative to prominent geographical features including, but not limited to, highways, roads, streams, and significant landmarks such as buildings, residences, schools, parks, hospitals, day care centers, and churches?	Yes
Does the map show a 3,000-foot radius from the property boundary?	Yes
D. Is a plot plan attached?	Yes
Does your plot plan clearly show a north arrow, an accurate scale, all property lines, all emission points, buildings, tanks, process vessels, other process equipment, and two bench mark locations?	Yes
Does your plot plan identify all emission points on the affected property, including all emission points authorized by other air authorizations, construction permits, PBRs, special permits, and standard permits?	Yes
Did you include a table of emission points indicating the authorization type and authorization identifier, such as a permit number, registration number, or rule citation under which each emission point is currently authorized?	Yes
E. Is a process flow diagram attached?	Yes
Is the process flow diagram sufficiently descriptive so the permit reviewer can determine the raw materials to be used in the process; all major processing steps and major equipment items; individual emission points associated with each process step; the location and identification of all emission abatement devices; and the location and identification of all waste streams (including wastewater streams that may have associated air emissions)?	Yes
F. Is a process description attached?	Yes
Does the process description emphasize where the emissions are generated, why the emissions must be generated, what air pollution controls are used (including process design features that minimize emissions), and where the emissions enter the atmosphere?	Yes
Does the process description also explain how the facility or facilities will be operating when the maximum possible emissions are produced?	Yes
G. Are detailed calculations attached? Calculations must be provided for each source with new or changing emission rates. For example, a new source, changing emission factors, decreasing emissions, consolidated sources, etc. You do not need to submit calculations for sources which are not changing emission rates with this project. Please note: the preferred format is an electronic workbook (such as Excel) with all formulas viewable for review. It can be emailed with the submittal of this application workbook.	Yes
Are emission rates and associated calculations for planned MSS facilities and related activities attached?	Yes

H. Is a material balance (Table 2, Form 10155) attached?	N/A
I. Is a list of MSS activities attached?	Yes
Are the MSS activities listed and discussed separately, each complete with the authorization mechanism or emission rates, frequency, duration, and supporting information if authorized by this permit?	Yes
J. Is a discussion of state regulatory requirements attached, addressing 30 TAC Chapters 101, 111, 112, 113, 115, and 117?	Yes
For all applicable chapters, does the discussion include how the facility will comply with the requirements of the chapter?	Yes
For all not applicable chapters, does the discussion include why the chapter is not applicable?	Yes
K. Are all other required tables, calculations, and descriptions attached?	Yes

VII. Signature

The owner or operator of the facility must apply for authority to construct. The appropriate company official (owner, plant manager, president, vice president, or environmental director) must sign all copies of the application. The applicant's consultant cannot sign the application. **Important Note: Signatures must be original in ink, not reproduced by photocopy, fax, or other means, and must be received before any permit is issued.**

The signature below confirms that I have knowledge of the facts included in this application and that these facts are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project for which application is made will not in any way violate any provision of the Texas Water Code (TWC), Chapter 7; the Texas Health and Safety Code, Chapter 382; the Texas Clean Air Act (TCAA); the air quality rules of the Texas Commission on Environmental Quality; or any local governmental ordinance or resolution enacted pursuant to the TCAA. I further state that I understand my signature indicates that this application meets all applicable nonattainment, prevention of significant deterioration, or major source of hazardous air pollutant permitting requirements. The signature further signifies awareness that intentionally or knowingly making or causing to be made false material statements or representations in the application is a criminal offense subject to criminal penalties.

Name:	Gregory Goodson
Signature:	
Original signature is required.	
Date:	May 4, 2020

V. Nonattainment Permits	
Complete the offsets section of the Federal Applicability sheet of this workbook.	Yes
Does the application contain a detailed LAER analysis? (attachment or as notes on the BACT sheet of this workbook)	Yes
Does the application contain an analysis of alternative sites, sizes, production processes, and control techniques for the proposed source? The analysis must demonstrate that the benefits of the proposed location and source configuration significantly outweigh the environmental and social costs of that locati+A124on.	Yes

VIII. Federal Regulatory Questions	
Indicate if any of the following requirements apply to the proposed facility. Note that some federal regulations apply to minor sources. Enter all applicable Subparts.	
A. Title 40 CFR Part 60	
Do NSPS subpart(s) apply to a facility in this application?	Yes
List applicable subparts you will demonstrate compliance with (e.g. Subpart M)	Subparts A and DDD
B. Title 40 CFR Part 61	
Do NESHAP subpart(s) apply to a facility in this application?	No
C. Title 40 CFR Part 63	
Do MACT subpart(s) apply to a facility in this application?	Yes
List applicable subparts you will demonstrate compliance with (e.g. Subpart VVVV)	Subparts A, FFFF (SS and UU only as referenced by FFFF), ZZZZ, and DDDDD

IX. Emissions Review	
A. Impacts Analysis	
Any change that results in an increase in off-property concentrations of air contaminants requires an air quality impacts demonstration. Information regarding the air quality impacts demonstration must be provided with the application and show compliance with all state and federal requirements. Detailed requirements for the information necessary to make the demonstration are listed on the Impacts sheet of this workbook.	
Does this project require an impacts analysis?	Yes
B. Disaster Review	
If the proposed facility will handle sufficient quantities of certain chemicals which, if released accidentally, would cause off-property impacts that could be immediately dangerous to life and health, a disaster review analysis may be required as part of the application. Contact the appropriate NSR permitting section for assistance at (512) 239-1250. Additional Guidance can be found at: https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/disrev-factsheet.pdf	
Does this application involve any air contaminants for which a disaster review is required?	No
C. Air Pollutant Watch List	
Certain areas of the state have concentrations of specific pollutants that are of concern. The TCEQ has designated these portions of the state as watch list areas. Location of a facility in a watch list area could result in additional restrictions on emissions of the affected air pollutant(s) or additional permit requirements. The location of the areas and pollutants of interest can be found at: https://www.tceq.texas.gov/toxicology/apwl/apwl.html	
Is the proposed facility located in a watch list area?	No

D. Mass Emissions Cap and Trade	
Is this facility located at a site within the Houston/Galveston nonattainment area (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties)?	Yes
Is Mass Emissions Cap and Trade applicable to the new or modified facilities?	No

X. Additional Requirements	
A. Bulk Fuel Terminals	
Is this project for a bulk fuel terminal?	No
B. Plant Fuel Gas Facilities	
Does this site utilize plant fuel gas?	No

Texas Commission on Environmental Quality
Form PI-1 General Application
Unit Types - Emission Rates

Permit primary industry (must be selected for workbook to function)	Chemical / Energy

Action Requested (only 1 action per FIN)	Include these emissions in annual (tpy) summary?	Facility ID Number (FIN)	Emission Point Number (EPN)	Source Name	Pollutant	Current Short-Term (lb/hr)	Current Long-Term (tpy)	Consolidated Current Short-Term (lb/hr)	Consolidated Current Long-Term (tpy)	Proposed Short-Term (lb/hr)	Proposed Long-Term (tpy)	Short-Term Difference (lb/hr)	Long-Term Difference (tpy)	Unit Type (Used for reviewing BACT and Monitoring Requirements)	Unit Type Notes (only if "other" unit type in Column O)
New/Modified	Yes	P-1792 (F)	F-75	Process Fugitives (8)	VOC	13.42	58.78			13.5	59.12	*0.0801*	*0.34*	Fugitives: Piping and Equipment Leak	
Not New/Modified	Yes	P-1792	F04	Pellet Losses (8)	VOC	52.3	78.3			52.3	78.3	0	0	Process Vent	
Not New/Modified	Yes	P-1792	F-05	Catalyst Mix and Holding tanks (8)	VOC	1.89	0.2			1.89	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	G-217	1592-42	Holding Pond	VOC	0.01	0.01			0.01	0.01	0	0	Other	Stormwater pond
Not New/Modified	Yes	F-355	25	F-355 Bagfilter	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-376	1792-4C	F-376 Baghouse	PM	0.02	0.05			0.02	0.05	0	0	Control: Bag Filter/Baghouse	
					PM10	0.02	0.05			0.02	0.05	0	0		
					PM2.5	0.02	0.05			0.02	0.05	0	0		
Not New/Modified	Yes	F-365	1792-4F	F-365 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-366	1792-4G	F-366 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-367	1792-4H	F-367 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-356	1792-4J	F-356 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-394	1792-15	F-394 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-395	1792-16	F-395 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-396	1792-17	F-396 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-397	1792-18	F-397 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-312	1792-21	F-312 Bagfilter	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-315	1792-22	F-315 Bagfilter	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-320	1792-23	F-320 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	U-450	1792-ENG2	U-450 Electric Power Generator Engine (9)	VOC	0.24	0.01			0.24	0.01	0	0	Engine: Emergency, Diesel	
					NOx	0.83	0.04			0.83	0.04	0	0		
					CO	4.34	0.22			4.34	0.22	0	0		
					SO2	0.01	<0.01			0.01	<0.01	0	0		
					PM	0.04	<0.01			0.04	<0.01	0	0		
					PM10	0.04	<0.01			0.04	<0.01	0	0		
					PM2.5	0.04	<0.01			0.04	<0.01	0	0		
Not New/Modified	Yes	F-398	1792-B1	F-398, Baghouse -Silo Loadout (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-399	1792-B2	F-399, Baghouse -Silo Loadout (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-400	1792-B3	F-400, Baghouse - Stripped Product Silos (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-401	1792-B4	F-401, Baghouse - Stripped Product Silos (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-402	1792-B5	F-402, Baghouse - Stripped Product Silos (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	F-403	1792-B6	F-403, Baghouse - Stripped Product Silos (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		

Texas Commission on Environmental Quality
Form PI-1 General Application
Unit Types - Emission Rates

Action Requested (only 1 action per FIN)	Include these emissions in annual (tpy) summary?	Facility ID Number (FIN)	Emission Point Number (EPN)	Source Name	Pollutant	Current Short-Term (lb/hr)	Current Long-Term (tpy)	Consolidated Current Short-Term (lb/hr)	Consolidated Current Long-Term (tpy)	Proposed Short-Term (lb/hr)	Proposed Long-Term (tpy)	Short-Term Difference (lb/hr)	Long-Term Difference (tpy)	Unit Type (Used for reviewing BACT and Monitoring Requirements)	Unit Type Notes (only if "other" unit type in Column O)
Not New/Modified	Yes	F-404	1792-B7	F-404, Baghouse - Stripped Product Silos (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	Yes	H-602	26	H-602 Hot Oil Heater	VOC	0.12	0.43			0.12	0.43	0	0	Heater	
					NOx	1.32	2.87			1.32	2.87	0	0		
					CO	1.8	6.5			1.8	6.5	0	0		
					SO2	0.01	0.05			0.01	0.05	0	0		
					PM	0.16	0.59			0.16	0.59	0	0		
					PM10	0.16	0.59			0.16	0.59	0	0		
					PM2.5	0.16	0.59			0.16	0.59	0	0		
New/Modified	Yes	P-1792	45	X-901 Flare Operations (8)	VOC	87.3	9.27			87.43	9.79	*0.1301*	*0.52*	Control: Flare	
					NOx	14.09	2.76			15.69	9.33	*1.6*	*6.57*		
					CO	72.45	19.92			80.59	53.41	*8.14*	*33.49*		
					SO2	0.04	0.03			0.45	0.84	*0.41*	*0.81*		
Not New/Modified	Yes	H-3030	1792-4B	H-3030 Catalytic Oxidizer (8)	VOC	3.12	9.85			3.12	9.85	0	0	Control: Oxidizer: Catalytic	
					NOx	1.11	4.86			1.11	4.86	0	0		
					CO	5.55	24.3			5.55	24.3	0	0		
					SO2	0.01	0.03			0.01	0.03	0	0		
					PM	0.09	0.12			0.09	0.12	0	0		
					PM10	0.09	0.12			0.09	0.12	0	0		
					PM2.5	0.09	0.12			0.09	0.12	0	0		
Not New/Modified	Yes	H-3030	1792-4M	Downtime of H-3030 (8)	VOC	35	3.36			35	3.36	0	0	MSS Activities	
Not New/Modified	Yes	B-112	1792-35	Line 1 Pellet Dryer(8)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-113	1792-36	Line 2 Pellet Dryer (8)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-114	1792-37	Line 3 Pellet Dryer (8)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-115	1792-38	Line 4 Pellet Dryer (8)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-1506	1792-39	Line 5 Pellet Dryer (8)	VOC	0.89	3.88			0.89	3.88	0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-1606	1792-40	Line 6 Pellet Dryer (8)	VOC	0.89	3.88			0.89	3.88	0	0	Polyethylene Facilities	
Not New/Modified	Yes	U-905	1792-41	U-905 Electric Power Generator Engine	VOC	0.85	0.02			0.85	0.02	0	0	Engine: Emergency, Diesel	
					NOx	10.54	0.27			10.54	0.27	0	0		
					CO	2.27	0.06			2.27	0.06	0	0		
					SO2	0.7	0.02			0.7	0.02	0	0		
					PM	0.75	0.02			0.75	0.02	0	0		
					PM10	0.75	0.02			0.75	0.02	0	0		
					PM2.5	0.75	0.02			0.75	0.02	0	0		
Not New/Modified	Yes	P-930	1792-43	P-930 Stormwater Pump Engine	VOC	0.56	0.02			0.56	0.02	0	0	Engine: Emergency, Diesel	
					NOx	6.98	0.29			6.98	0.29	0	0		
					CO	1.5	0.06			1.5	0.06	0	0		
					SO2	0.46	0.02			0.46	0.02	0	0		
					PM	0.5	0.02			0.5	0.02	0	0		
					PM10	0.5	0.02			0.5	0.02	0	0		
					PM2.5	0.5	0.02			0.5	0.02	0	0		
Not New/Modified	Yes	E-502	1792-76	Cooling Tower (8)	VOC	1.58	1.65			1.58	1.65	0	0	Cooling Tower	
					PM	0.38	1.66			0.38	1.66	0	0		
					PM10	0.38	1.66			0.38	1.66	0	0		
					PM2.5	0.38	1.66			0.38	1.66	0	0		
Not New/Modified	Yes	P-1792	LL03	Slop Oil Loading (8)	VOC	3.16	0.08			3.16	0.08	0	0	Loading: Truck	
Not New/Modified	Yes	TK-902	03	Spent Solvent Tank (8)	VOC	3.06	0.09			3.06	0.09	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-402	28	Solvent Rundown Tank (8)	VOC	3.24	0.04			3.24	0.04	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-401	29	Solvent Holding Tank	VOC	3.24	0.08			3.24	0.08	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-405	30	Methanol Tank (8)	VOC	17.29	0.26			17.29	0.26	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-912	1792-11	Solvent Storage Tank (8)	VOC	3.24	0.18			3.24	0.18	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-903	1792-47	API Skim Tank	VOC	1.01	0.2			1.01	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-430	31	Chilled Water Methanol (8)	VOC	1.44	0.2			1.44	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-905	1792-42	Diesel Fuel Tank	VOC	0.29	0.02			0.29	0.02	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-930	1792-44	Diesel Fuel Tank	VOC	0.29	0.02			0.29	0.02	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-904	1792-45	Stormwater Holding Tank	VOC	0.14	0.02			0.14	0.02	0	0	Other	Stormwater Equipment
Not New/Modified	Yes	G-214	1792-46	API Separator	VOC	0.58	2.54			0.58	2.54	0	0	Wastewater Facilities	
Not New/Modified	Yes	G-212	1792-48	Stormwater Holding Pond	VOC	0.01	0.01			0.01	0.01	0	0	Other	Stormwater Equipment

Texas Commission on Environmental Quality
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Unit Types - Emission Rates

Action Requested (only 1 action per FIN)	Include these emissions in annual (tpy) summary?	Facility ID Number (FIN)	Emission Point Number (EPN)	Source Name	Pollutant	Current Short-Term (lb/hr)	Current Long-Term (tpy)	Consolidated Current Short-Term (lb/hr)	Consolidated Current Long-Term (tpy)	Proposed Short-Term (lb/hr)	Proposed Long-Term (tpy)	Short-Term Difference (lb/hr)	Long-Term Difference (tpy)	Unit Type (Used for reviewing BACT and Monitoring Requirements)	Unit Type Notes (only if "other" unit type in Column O)
Not New/Modified	Yes	P-1792	1792-50	De-ethanizer Blowdown Drum	VOC	1.62	0.59			1.62	0.59	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	P-1792	1792-51	Depropanizer Blowdown Drum	VOC	1.62	0.59			1.62	0.59	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	P-1792	F-75	Process Fugitives (9)	VOC	13.42	58.75			13.42	58.75	0	0	Fugitives: Piping and Equipment Leak	
Not New/Modified	Yes	P-1792	F04	Pellet Losses (9)	VOC	52.3				52.3		0	0	Polyethylene Facilities	
Not New/Modified	Yes	P-1792	F-05	Catalyst Mix and Holding tanks (9)	VOC	1.89	0.2			1.89	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	F-355	25	F-355 Bagfilter (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
New/Modified	No	P-1792	45	X-901 Flare Operations (9)	VOC	86.76	9.16			87.43	9.79	*0.6701*	*0.63*	Control: Flare	
					NOx	12.27	2.76			15.69	9.33	*3.42*	*6.57*		
					CO	89.2	19.88			80.59	53.41	**-8.61**	*33.53*		
					SO2	0.04	0.03			0.45	0.84	*0.41*	*0.81*		
Not New/Modified	Yes	H-3030	1792-4M	H-3030 Catalytic Oxidizer (9)	VOC	3.12	9.85			3.12	9.85	0	0	Control: Oxidizer: Catalytic	
					NOx	1.11	4.86			1.11	4.86	0	0		
					CO	5.55	24.3			5.55	24.3	0	0		
					SO2	0.01	0.03			0.01	0.03	0	0		
					PM	0.09	0.12			0.09	0.12	0	0		
					PM10	0.09	0.12			0.09	0.12	0	0		
					PM2.5	0.09	0.12			0.09	0.12	0	0		
Not New/Modified	Yes	H-3030	1792-4B	Downtime of H-3030 (9)	VOC	35	3.36			35	3.36	0	0	MSS Activities	
Not New/Modified	Yes	ROX-1	ROX-1	ROX-1, Oxidizer (9)	VOC	3.12	9.85			3.12	9.85	0	0	Control: Oxidizer: Thermal	
					NOx	1.11	4.86			1.11	4.86	0	0		
					CO	5.55	24.3			5.55	24.3	0	0		
					SO2	0.01	0.03			0.01	0.03	0	0		
					PM	0.09	0.12			0.09	0.12	0	0		
					PM10	0.09	0.12			0.09	0.12	0	0		
					PM2.5	0.09	0.12			0.09	0.12	0	0		
Not New/Modified	Yes	ROX-DT	ROX-DT	Downtime of ROX-1 (9)	VOC	35	3.36			35	3.36	0	0	MSS Activities	
					PM							0	0		
					PM10							0	0		
					PM2.5							0	0		
Not New/Modified	Yes	B-112	1792-35	Line 1 Pellet Dryer (9)	VOC	0.68				0.68		0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-113	1792-36	Line 2 Pellet Dryer (9)	VOC	0.68				0.68		0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-114	1792-37	Line 3 Pellet Dryer (9)	VOC	0.68				0.68		0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-115	1792-38	Line 4 Pellet Dryer (9)	VOC	0.68				0.68		0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-1506	1792-39	Line 5 Pellet Dryer (9)	VOC	0.89				0.89		0	0	Polyethylene Facilities	
Not New/Modified	Yes	B-1606	1792-40	Line 6 Pellet Dryer (9)	VOC	0.89				0.89		0	0	Polyethylene Facilities	
Not New/Modified	Yes	P-1792, B-112, B-113, B-114, B-115, B-1506, B-1606	PELLET	Includes EPNs F-04, 1792-35, 1792-36, 1792-37, 1792-38, 1792-39, 1792-40	VOC		98.02				98.02	0	0	Polyethylene Facilities	
Not New/Modified	Yes	GRP-DRYERS	GRP-DRYERS	Pellet Dryers (9)	VOC	12	25			12	25	0	0	Polyethylene Facilities	
Not New/Modified	Yes	E-502	1792-76	Cooling Tower (9)	VOC	1.58	1.65			1.58	1.65	0	0	Cooling Tower	
					PM	0.38	1.66			0.38	1.66	0	0		
					PM10	0.38	1.66			0.38	1.66	0	0		
					PM2.5	0.38	1.66			0.38	1.66	0	0		
Not New/Modified	Yes	E-503	1792-77	Cooling Tower	VOC	0.25	0.26			0.25	0.26	0	0	Cooling Tower	
					PM	0.06	0.26			0.06	0.26	0	0		
					PM10	0.06	0.26			0.06	0.26	0	0		
					PM2.5	0.06	0.26			0.06	0.26	0	0		
Not New/Modified	Yes	P-1792	LL03	Slop Oil Loading (9)	VOC	3.16	0.08			3.16	0.08	0	0	Loading: Truck	
Not New/Modified	Yes	TK-902	03	Spent Solvent Tank (9)	VOC	3.06	0.09			3.06	0.09	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-912	1792-11	Solvent Storage Tank (9)	VOC	3.24	0.18			3.24	0.18	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-430	31	Chilled Water Methanol (9)	VOC	1.44	0.2			1.44	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	V-430b	31b	V-430B, Chilled Water Methanol (9)	VOC	1.44	0.2			1.44	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-402	28	Solvent Rundown Tank (9)	VOC	3.24	0.04			3.24	0.04	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	Yes	TK-405	30	Methanol Tank (9)	VOC	17.29	0.26			17.29	0.26	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	

Texas Commission on Environmental Quality
Form PI-1 General Application
Stack Parameters

Emission Point Discharge Parameters												
EPN	Included in EMEW?	UTM Coordinates Zone	East (Meters)	North (Meters)	Building Height (ft)	Height Above Ground (ft)	Stack Exit Diameter (ft)	Velocity (FPS)	Temperature (°F)	Fugitives - Length (ft)	Fugitives - Width (ft)	Fugitives - Axis Degrees
F-75	Yes											
F04	No	15	313972	3300591						120	50	90
F-05	No	15	314000	3301020		15				750	250	90
1592-42	No	15	314748	3301219								
25	No	15	314038	3300892	0	25	1	161	100			
1792-4C	No	15	314080	3300830	10	28	0.067	44.78	Amb.			
1792-4F	No	15	314060	3300790	0	20	0.067	44.78	Amb.			
1792-4G	No	15	314045	3300790	0	20	0.067	44.78	Amb.			
1792-4H	No	15	314035	3300790	0	20	0.067	44.78	Amb.			
1792-4J	No	15	314010	3300790	0	20	0.067	44.78	Amb.			
1792-15	No	15	314020	3300800	0	20	0.067	44.78	Amb.			
1792-16	No	15	314025	3300800	0	20	0.067	44.78	Amb.			
1792-17	No	15	314015	3300800	0	20	0.067	44.78	Amb.			
1792-18	No	15	314160	3300800	0	20	0.067	44.78	Amb.			
1792-21	No	15	314028	3300670	0	20	0.067	44.78	Amb.			
1792-22	No	15	314026	3300850	0	20	0.067	44.78	Amb.			
1792-23	No	15	314515	3300900	0	20	0.067	44.78	Amb.			
1792-ENG2	No	15	314180	3301150	0	15	0.5	153	950			
1792-B1	No	15	313993	3300775								
1792-B2	No	15	314001	3300775								
1792-B3	No	15	314009	3300775								
1792-B4	No	15	314017	3300775								
1792-B5	No	15	314025	3300775								
1792-B6	No	15	314033	3300775								
1792-B7	No	15	314040	3300775								
26	No	15	313920	3300900	25	62	3	7.36	850			
45	Yes											
1792-4B	No	15	314140	3300840	0	35	2.5	42	450			
1792-4M	No	15	314144	3300868	0	40	1.67	123	100			
1792-35	No	15	313970	3301310	0	4	1.13	63.8	70			
1792-36	No	15	314001	3301315	0	4	1.22	54.7	70			
1792-37	No	15	314031	3301320	0	4	1.22	54.7	70			
1792-38	No	15	314057	3301322	0	4	1.22	54.7	70			
1792-39	No	15	313892	3301080	0	4	1	85	70			
1792-40	No	15	313853	3301080	0	4	1	85	70			
1792-41	No	15	314180	3301150	0	15	0.5	153	950			
1792-43	No	15	314205	3301070	0	6	0.25	289	950			
1792-76	No	15	314000	3300950	0	40	22	0.003	Amb.			
LL03	No	15	314200	3301060	0	10	2	0.08	70			
03	No	15	314300	3300700	0	12	0.01	0.01	Amb.			
28	No	15	314062	3301015	0	12	0.01	0.01	Amb.			
29	No	15	314053	3301015	0	18	0.01	0.01	Amb.			
30	No	15	314121	3300948	0	16	0.01	0.01	Amb.			
1792-11	No	15	313810	3300810	0	12	0.01	0.01	Amb.			

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Stack Parameters

EPN	Included in EMEW?	UTM Coordinates Zone	East (Meters)	North (Meters)	Building Height (ft)	Height Above Ground (ft)	Stack Exit Diameter (ft)	Velocity (FPS)	Temperature (°F)	Fugitives - Length (ft)	Fugitives - Width (ft)	Fugitives - Axis Degrees
1792-47	No	15	314230	3301070	0	10	0.01	0.01	Amb.			
31	No	15	314062	3300985	0	12	0.18	0.4	75			
1792-42	No	15	314167	3301133	0	10	0.01	0.01	Amb.			
1792-44	No	15	314205	3301070	0	10	0.01	0.01	Amb.			
1792-45	No	15	314270	3301100	0	30	0.01	0.01	Amb.			
1792-46	No	15	314200	3301070								
1792-48	No	15	314200	3301270								
1792-50	No	15	314050	3301167	3	3	0.2		Amb.			
1792-51	No	15	314056	3301168	3	3	0.2		Amb.			
ROX-1	No	15	314140	3300840	0	35	2.5	42	450			
ROX-DT	No	15	314140	3300840	0	35	2.5	42	450			
PELLET	No	15	313970	3301310			3.28	0.003	Amb.	800		
GRP-DRYERS	No	15	313970	3301310	0	20	1.13	63.8	70			
1792-77	No	15	313736	3301228	0	40	22	0.003	Amb.			
31b	No	15	314032	3301186	0	12	0.18	0.4	75			

I. Public Notice Applicability

A. Application Type

Is this an application for a new or major modification of a PSD (including GHG), Nonattainment, or HAP permit?	Yes
Is this an application for a minor permit amendment?	Yes
Is there any change in character of emissions in this application (a new criteria pollutant or a new VOC or PM species)?	No
Is there a new air contaminant in this application?	No

B. Project Increases and Public Notice Thresholds (for Initial and Amendment Projects)

For public notice applicability, the agency does not include consolidation or incorporation of any previously authorized facility or activity (PBR, standard permits, etc.), changes to permitted allowable emission rates when exclusively due to changes to standardized emission factors, or reductions in emissions which are not enforceable through the amended permit. Thus, the total emissions increase would be the sum of emissions increases under the amended permit and the emissions decreases under the amended permit for each air contaminant.

The table below will generate emission increases based on the values represented on the "Unit Types - Emission Rates" sheet. Use the "yes" and "no" options in column B of the "Unit Types - Emission Rates" worksheet to indicate if a unit's proposed change of emissions should be included in these totals.

Notes:

1. Emissions of PM, PM10, and/or PM2.5 may have been previously quantified and authorized as PM, PM10,and/or PM2.5. These emissions will be speciated based on current guidance and policy to demonstrate compliance with current standards and public notice requirements may change during the permit review.

2. All renewals require public notice.

This row is optional. If you do not think the table below accurately represents public notice applicability increases for your project, provide discussion here (1000 characters).	
Do the facilities handle, load, unload, dry, manufacture, or process grain, seed, legumes, or vegetable fibers (agricultural facilities)?	No

Pollutant	Current Long-Term (tpy)	Consolidated Emissions (tpy)	Proposed Long-Term (tpy)	Project Change in Allowable (tpy)	PN Threshold	Notice required?
VOC	397.89	0.00	398.75	0.86	5	No
PM	5.03	0.00	5.03	0.00	5	No
PM_{10}	5.03	0.00	5.03	0.00	5	No
$PM_{2.5}$	5.03	0.00	5.03	0.00	5	No
NO_x	20.81	0.00	27.38	6.57	5	Yes
CO	99.66	0.00	133.15	33.49	50	No
SO_2	0.22	0.00	1.03	0.81	10	No
Pb	0.00	0.00	0.00	0.00	0.6	No

* Notice is required for PM, PM10, and PM2.5 if one of these pollutants is above the threshold.

** Notice of a GHG action is determined by action type. Initial and major modification always require notice. Voluntary updates require a consolidated notice if there is a change to BACT. Project emission increases of CO2e (CO2 equivalent) are not relevant for determining public notice of GHG permit actions.

C. Is public notice required for this project as represented in this workbook? If no, proceed to Section III Small Business Classification. Note: public notice applicability for this project may change throughout the technical review.	Yes
D. Are any HAPs to be authorized/re-authorized with this project? The category "HAPs" must be specifically listed in the public notice if the project authorizes (reauthorizes for renewals) any HAP pollutants.	No

II. Public Notice Information

Complete this section if public notice is required (determined in the above section) or if you are not sure if public notice is required.

A. Contact Information

Enter the contact information for the **person responsible for publishing.** This is a designated representative who is responsible for ensuring public notice is properly published in the appropriate newspaper and signs are posted at the facility site. This person will be contacted directly when the TCEQ is ready to authorize public notice for the application.

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Gregory
Last Name:	Goodson
Title:	Environmental Superintendent
Company Name:	Chevron Phillips Chemical Company LP
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6879
Fax Number:	
Email Address:	GOODSGA@cpchem.com

Enter the contact information for the **Technical Contact.** This is the designated representative who will be listed in the public notice as a contact for additional information.

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Oluwatobi
Last Name:	Adeyinka
Title:	Environmental Engineer
Company Name:	Chevron Phillips Chemical LP
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6285
Fax Number:	
Email Address:	ADEYIO@cpchem.com

B. Public place

Place a copy of the full application (including all of this workbook and all attachments) at a public place in the county where the facilities are or will be located. You must state where in the county the application will be available for public review and comment. The location must be a public place and described in the notice. A public place is a location which is owned and operated by public funds (such as libraries, county courthouses, city halls) and cannot be a commercial enterprise. You are required to pre-arrange this availability with the public place indicated below. The application must remain available from the first day of publication through the designated comment period.

If this is an application for a PSD, nonattainment, or FCAA §112(g) permit, the public place must have internet access available for the public as required in 30 TAC § 39.411(f)(3).

If the application is submitted to the agency with information marked as Confidential, you are required to indicate which specific portions of the application are not being made available to the public. These portions of the application must be accompanied with the following statement: ***Any request for portions of this application that are marked as confidential must be submitted in writing, pursuant to the Public Information Act, to the TCEQ Public Information Coordinator, MC 197, P.O. Box 13087, Austin, Texas 78711-3087.***

Name of Public Place:	TXPublicNotice.com and Sterling Municipal Library
Physical Address:	1 Mary Elizabeth Wilbanks Avenue
Address Line 2:	
City:	Baytown
ZIP Code:	77520
County:	Harris
Has the public place granted authorization to place the application for public viewing and copying?	Yes
Does the public place have Internet access available for the public?	Yes

C. Alternate Language Publication

In some cases, public notice in an alternate language is required. If an elementary or middle school nearest to the facility is in a school district required by the Texas Education Code to have a bilingual program, a bilingual notice will be required. If there is no bilingual program required in the school nearest the facility, but children who would normally attend those schools are eligible to attend bilingual programs elsewhere in the school district, the bilingual notice will also be required. If it is determined that alternate language notice is required, you are responsible for ensuring that the publication in the alternate language is complete and accurate in that language.

Is a bilingual program required by the Texas Education Code in the School District?	Yes
Are the children who attend either the elementary school or the middle school closest to your facility eligible to be enrolled in a bilingual program provided by the district?	Yes
If yes to either question above, list which language(s) are required by the bilingual program?	Spanish

D. PSD and Nonattainment Permits Only	
If this is an application for emissions of GHGs, select either "Separate Public Notice" or "Consolidated Public Notice". Note: Separate public notices requires a separate application.	Not applicable
We must notify the applicable county judge and presiding officer when a PSD or Nonattainment permit or modification application is received. This information can be obtained at: https://www.txdirectory.com	
Provide the information for the **County Judge** for the location where the facility is or will be located.	
The Honorable:	Lina Hidalgo
Mailing Address:	1001 Preston, Suite 911
Address Line 2:	
City:	Houston
State:	Texas
ZIP Code:	77002
Provide the information for the **Presiding Officer(s)** of the municipality for this facility site. This is frequently the Mayor.	
First Name:	Brandon
Last Name:	Capetillo
Title:	Mayor
Mailing Address:	2401 Market St.
Address Line 2:	
City:	Baytown
State:	TX
ZIP Code:	77520
Are the proposed facilities located within 100 km or less of an affected state or Class I Area?	No

III. Small Business Classification	
Complete this section to determine small business classification. If a small business requests a permit, agency rules (30 TAC § 39.603(f)(1)(A)) allow for alternative public notification requirements if all of the following criteria are met. If these requirements are met, public notice does not have to include publication of the prominent (12 square inch) newspaper notice.	
Does the company (including parent companies and subsidiary companies) have fewer than 100 employees or less than $6 million in annual gross receipts?	No
Small business classification:	**No**

I. County Classification	
Does the project require retrospective review?	No
County (completed for you from your response on the General sheet)	Harris
This project will be located in an area that is in serious nonattainment for ozone as of Sept. 23, 2019. Select from the drop-down list to the right if you would like the project to be reviewed under a different classification.	Ozone - Serious
Determination:	**This project will be located in a county with a Serious Ozone nonattainment classification, and the project will be reviewed under a Serious Ozone nonattainment classification. Complete the nonattainment section below and provide an analysis with the application.**

II. PSD and GHG PSD Applicability Summary			
Is netting required for the PSD analysis for this project?			**No**
Pollutant	**Project Increase**	**Threshold**	**PSD Review Required?**
CO	79.66	100	No
NO_x	15.54	25	No
PM	0	25	No
PM_{10}	0	15	No
$PM_{2.5}$	0	10	No
SO_2	1.37	40	No
Pb			
H_2S			
TRS			
Reduced sulfur compounds (including H_2S)			
H_2SO_4			
Fluoride (excluding HF)			
CO2e			

III. Nonattainment Applicability Summary			
Is netting required for the nonattainment analysis for this project?			**Yes**
If yes, the project increases listed below should be after netting has been performed. Attach the netting information to the application.			
Pollutant	**Project Increase (after netting)**	**Threshold**	**NA Review Required?**
Ozone (as VOC)	3.64	5	No
Ozone (as NO_x)	15.54	5	Yes

IV. Offset Summary (for Nonattainment Permits)			
Pollutant	**Offset Ratio**	**Offset Quantity Required (tpy)**	**Where is the offset coming from?**
Ozone (as NO_x)	1.20 : 1	18.648	NOX ERCs

I. General Information - Non-Renewal	
Is this project for new facilities controlled and operated directly by the federal government? (30 TAC § 116.141(b)(1) and 30 TAC § 116.163(a))	No
A fee of $75,000 shall be required if no estimate of capital project cost is included with the permit application. (30 TAC § 116.141(d)) Select "yes" here to use this option. Then skip sections II and III.	No
Select Application Type	Major Application

II. Direct Costs - Non-Renewal	
Type of Cost	**Amount**
Process and control equipment not previously owned by the applicant and not currently authorized under this chapter.	$27,000.00
Auxiliary equipment, including exhaust hoods, ducting, fans, pumps, piping, conveyors, stacks, storage tanks, waste disposal facilities, and air pollution control equipment specifically needed to meet permit and regulation requirements.	$62,000.00
Freight charges.	$4,000.00
Site preparation, including demolition, construction of fences, outdoor lighting, road, and parking areas.	$169,000.00
Installation, including foundations, erection of supporting structures, enclosures or weather protection, insulation and painting, utilities and connections, process integration, and process control equipment.	$482,000.00
Auxiliary buildings, including materials storage, employee facilities, and changes to existing structures.	$0.00
Ambient air monitoring network.	$0.00
Sub-Total:	$744,000.00

III. Indirect Costs - Non-Renewal	
Type of Cost	**Amount**
Final engineering design and supervision, and administrative overhead.	$364,000.00
Construction expense, including construction liaison, securing local building permits, insurance, temporary construction facilities, and construction clean-up.	$529,000.00
Contractor's fee and overhead.	$263,000.00
Sub-Total:	$1,156,000.00

IV. Calculations - Non-Renewal
For GHG permits: A single PSD fee (calculated on the capital cost of the project per 30 TAC § 116.163) will be required for all of the associated permitting actions for a GHG PSD project. Other NSR permit fees related to the project that have already been remitted to the TCEQ can be subtracted when determining the appropriate fee to submit with the GHG PSD application. Identify these other fees in the GHG PSD permit application.

In signing the "General" sheet with this fee worksheet attached, I certify that the total estimated capital cost of the project as defined in 30 TAC §116.141 is equal to or less than the above figure. I further state that I have read and understand Texas Water Code § 7.179, which defines Criminal Offenses for certain violations, including intentionally or knowingly making, or causing to be made, false material statements or representations.

Estimated Capital Cost		Major Application Fee
Less than $300,000		$3,000 (minimum fee)
$300,000 - $7,500,000		1.0% of capital cost
$300,000 - $25,000,000		N/A
Greater than $7,500,000		$75,000 (maximum fee)
Greater than $25,000,000		N/A

Your estimated capital cost:	**$1,900,000.00**	x 1.0% =
Permit Application Fee:		**$19,000.00**

VI. Total Fees

Note: fees can be paid together with one payment or as two separate payments.	
Non-Renewal Fee	$19,000.00
Total	$19,000.00

VII. Payment Information

A. Payment One (required)	
Was the fee paid online?	No
Enter the fee amount:	$ 19,000.00
Enter the check, money order, ePay Voucher, or other transaction number:	10722406
Enter the Company name as it appears on the check:	Chevron Phillips Chemical
C. Total Paid	**$19,000.00**

VIII. Professional Engineer Seal Requirement

Is the estimated capital cost of the project above $2 million?	No
Is the application required to be submitted under the seal of a Texas licensed P.E.? Note: an electronic PE seal is acceptable.	No

Pollutant	Does this pollutant require PSD review?	How will you demonstrate that this project meets all applicable requirements?	Notes	Additional Notes (optional)
Ozone	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.	
VOC	No	MERA steps 0-2 AND Modeling (screen or refined)	Attach both an "Electronic Modeling Evaluation Workbook" (EMEW) AND a detailed description of which MERA step was met. Include speciated emission rates with the total VOC and/or PM species corresponding to the short-term and long-term differences represented on the Unit Types-Emission Rates sheet.	
PM	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.	
PM10	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.	
PM2.5	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.	
NOx	No	Modeling: screen or refined	Attach a completed "Electronic Modeling Evaluation Workbook" (EMEW).	
CO	No	Modeling: screen or refined	Attach a completed "Electronic Modeling Evaluation Workbook" (EMEW).	
SO2	No	Modeling: screen or refined	Attach a completed "Electronic Modeling Evaluation Workbook" (EMEW).	

Plant Type	Current Tier I BACT	Confirm	Additional Notes

Action Requested	FINs	Unit Type	Pollutant	Current Tier I BACT	Confirm	Additional Notes
New/Modified	P-1792 (F)	Fugitives: Piping and Equipment Leak	VOC	Specify which is applicable: 1. Uncontrolled VOC emissions < 10 tpy: none 2. 10 tpy < uncontrolled VOC emissions < 25 tpy: 28M leak detection and repair program. 75% credit for 28M. 3. Uncontrolled VOC emissions > 25 tpy: 28VHP leak detection and repair program. 97% credit for valves, 85% for pumps and compressors. 4. VOC vp < 0.002 psia: no inspection required, no fugitive emissions expected. For emissions of approved odorous compounds (chlorine, ammonia, hydrogen sulfide, hydrogen cyanide and mercaptans only): AVO inspection twice per shift. Appropriate credit for AVO program.	Yes	see BACT and Nonattainment review sections.
			MSS	Same as normal operation BACT requirements.	Yes	see BACT and Nonattainment review sections.
New/Modified	P-1792	Control: Flare	VOC	VOC: Meets 40 CFR 60.18. Destruction Efficiency: 99% for certain compounds up to three carbons, 98% otherwise. No flaring of halogenated compounds is allowed. Flow monitor required. Composition or BTU analyzer may be required.	Yes	see BACT and Nonattainment review sections.
			NOx	Provide emission factor used and reference.	Yes	See emissions calculations section
			CO	Provide emission factor used and reference.	Yes	See emissions calculations section
			SO2	Provide emission factor used and reference.	Yes	See emissions calculations section
			MSS	Same as normal operation BACT requirements.	Yes	

Texas Commission on Environmental Quality
Form PI-1 General Application
Monitoring

FIN	Unit Type	Pollutant	Minimum Monitoring Requirements	Confirm	Additional Notes for Monitoring
P-1792 (F)	Fugitives: Piping and Equipment Leak	VOC	Use EPA Method 21 to monitor for leaks from seals on pumps, compressors, agitator and valve seals on piping components in light liquid and gas VOC service quarterly. Gas or hydraulic check new and a replaced connectors prior to returning to service, or monitor with Method 21 within 15 days of returning to service. Leak detection and repair (LDAR) Program 28M has a leak definition where repair action is required at 10,000 ppmv. LDAR Program 28 VHP has a leak definition where repair action is required at 500 ppmv for valves and connectors and 2000 ppmv for pumps, compressors and agitators. Check connectors weekly using audio, visual or olfactory (AVO) senses to observe leaks. Record results and corrective action taken.	Yes	Also 28CNTQ for connector monitoring
P-1792	Control: Flare	VOC	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	
		NOx	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	
		CO	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	
		SO2	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	

Texas Commission on Environmental Quality
Form PI-1 General Application
Materials

Item	How submitted	Date submitted
A. Administrative Information		
Form PI-1 General Application	STEERS	05/04/2020
Hard copy of the General sheet with original (ink) signature	Mail	05/04/2020
Professional Engineer Seal	STEERS	05/04/2020
B. General Information		
Copy of current permit (both Special Conditions and MAERT)		
Core Data Form		
Area map	STEERS	05/04/2020
Plot plan	STEERS	05/04/2020
Process description	STEERS	05/04/2020
Process flow diagram	STEERS	05/04/2020
List of MSS activities	STEERS	05/04/2020
State regulatory requirements discussion	STEERS	05/04/2020
C. Federal Applicability		
Summary and project emission increase determination - Tables 1F and 2F	STEERS	05/04/2020
Netting analysis (if required) - Tables 3F and 4F as needed	Not applicable	
D. Technical Information		
BACT discussion, if additional details are attached	STEERS	05/04/2020
Monitoring information, if additional details are attached	STEERS	05/04/2020
Material Balance (if applicable)		
Calculations	STEERS	05/04/2020
E. Impacts Analysis		
Qualitative impacts analysis		
MERA analysis	STEERS	05/04/2020
Electronic Modeling Evaluation Workbook: SCREEN3	STEERS	05/04/2020
Electronic Modeling Evaluation Workbook: NonSCREEN3	Not applicable	
PSD modeling protocol		
F. Additional Attachments		

Chevron Phillips Chemical Company LP

Cedar Bayou Plant

9500 I-10 East, Exit 796
Baytown, Texas 77521-9570

Phone 281-421-6500
Fax 281-421-6272
E-mail www.cpchem.com

May 4, 2020

Federal Express

Cashiers Office (MC-214)
Texas Commission on Environmental Quality)
12100 Park 35 Circle
Austin, Texas 78753

Re: Chevron Phillips Chemical Company LP
Cedar Bayou Plant
Permit No. 2462C Amendment
Baytown, Harris County
Regulated Entity Number RN103919817
Customer Reference Number CN600303614

Attn: Cashiers Office

On behalf of Chevron Phillips Chemical LP, I am submitting the attached copy of the fee payment check in the amount of $19,000 for the above referenced permit application. The original fee check was inadvertently submittted without a cover letter prior to the application being submitted via STEERS ePermits on May 4, 2020.

A copy of the fee payment section from of the PI-1 workbook are attached along with the fee payment.

Should you have any questions regarding this matter, please contact Mr. Oluwatobi "Tobi" Adeyinka at (281) 421-6285.

Sincerely,

Gregory Goodson
Environmental Superintendent

GG/

Attachments

cc: Air Program Manager, Region 12, TCEQ, Houston, w/enclosures
Director, Harris County Public Health and Environmental Services, Pasadena, w/enclosures

Chevron Phillips Chem Co LP
Accounts Payable
The Woodlands, TX 77380

PAYEE NO.	DATE
59342	04/23/2020

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. BOX 13088
AUSTIN, TX 78711-3089

CHECK NO.	AMOUNT	DOCUMENT
10722406	$19,000.00	2100003008

INVOICE NUMBER	INVOICE DATE	DOCUMENT	GROSS	DISCOUNT	NET
042120HQ	04/21/20	331200004057 2020	19,000.00	0.00	19,000.00
CHEVRON PHILLIPS	CHEMICAL COMPANY LP PERMIT AMENDMENT APPLICATION NSR2462C				APPLICATION FEE
		TOTAL	19,000.00	0.00	19,000.00

Chevron Phillips Chem Co LP
Accounts Payable
The Woodlands, TX 77380

JPMorgan Chase Bank, N.A.
New York, NY 10005, NY

50-937
213

Check Date
04/23/2020

Check Number
10722406

Pay In U.S. Dollars

NINETEEN THOUSAND AND 00/100*******

********19,000.00*

To The Order Of TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. BOX 13088
AUSTIN, TX 78711-3089

Michael C Emmons

Treasurer

⑈10722406⑈ ⑆021309379⑆ 601841281⑈

Chevron Phillips Chemical Company LP

Cedar Bayou Plant

9500 I-10 East, Exit 796
Baytown, Texas 77521-9570

Phone 281-421-6500
Fax 281-421-6272
E-mail www.cpchem.com

May 4, 2020

Federal Express

Cashiers Office (MC-214)
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Re: Air Permitting Surcharge Payment
Chevron Phillips Chemical Company LP
Cedar Bayou Plant
Permit No. 2462C Amendment
Baytown, Harris County
Regulated Entity No. RN103919817
Customer Reference No. CN600303614

Attn: Cashiers Office

On behalf of Chevron Phillips Chemical LP, I am submitting the attached Form APD-APS and a copy of the fee payment check in the amount of $20,000 for the above referenced permit application. The original fee check was inadvertently submittted without a cover letter prior to the application being submitted via STEERS ePermits on May 4, 2020.

Should you have any questions regarding this matter, please contact Mr. Oluwatobi "Tobi" Adeyinka at (281) 421-6285.

Sincerely,

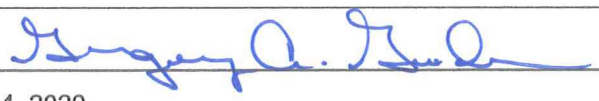
Gregory A. Goodson
Environmental Superintendent

GG/

Enclosures

cc: Air Program Manager, Region 12, TCEQ, Houston, w/enclosures
Director, Harris County Public Health and Environmental Services, Pasadena, w/enclosures

Form APD-EXP Expedited Permitting Request

I. Contact Information	
Company or Other Legal Customer Name: Chevron Phillips Chemical Company LP	
Customer Reference Number (CN): CN600303614	
Regulated Entity Number (RN): RN103919817	
Company Official or Technical Contact Name: Oluwatobi Adeyinka	
Phone Number: 281-421-6285	
Email: ADEYIO@cpchem.com	
II. Project Information	
Facility Type: Polyethylene Unit PEU-1792 Flare X-901	
Permit Number: 2462C	
Project Number: 365559	
III. Economic Justification	
The purpose of the application associated with this request to expedite will benefit the economy of this state or an area of this state.	☒ YES ☐ NO
IV. Delinquent Fees and Penalties	
Applications will not be expedited if any delinquent fees and/or penalties are owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ. For more information regarding Delinquent Fees and Penalties, go to the TCEQ Web site at: www.tceq.texas.gov/agency/delin/index.html.	
V. Signature	
The signature below confirms that I have knowledge of the facts included in this application and that these facts are true and correct to the best of my knowledge and belief. As the applicant, I commit to fulfilling all expectations of the expedited permitting program and application requirements promptly. Failure to meet any expectation or requirement may cause my application to be removed from the expedited permitting program and possibly voided at the discretion of the TCEQ Executive Director. The signature further signifies awareness that intentionally or knowingly making or causing to be made false material statements or representations in the application is a criminal offense subject to criminal penalties.	
Name: Gregory Goodson	
Signature: 	
Date: May 4, 2020	

Reset Form

Texas Commission on Environmental Quality
Form APD-APS Air Permitting Surcharge Payment

I. Contact Information	
Company or Other Legal Customer Name:	Chevron Phillips Chemical Company LP
Customer Reference Number (CN):	CN600303614
Regulated Entity Number (RN):	RN103919817
Company Official or Technical Contact Information: (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other:_____)	
Name:	Oluwatobi Adeyinka
Title:	Environmental Engineer
Mailing Address:	9500 I-10 East
City:	Baytown
State:	TX
ZIP Code:	77521
Telephone Number:	281-421-6285
E-mail Address:	ADEYIO@cpchem.com
II. Project Information	
Facility Name:	Polyethylene Unit PEU-1792 Flare X-901
Permit Number:	2462C
Project Number:	365559
III. Surcharge Payment	
Project Type:	Nonattainment
Fee Amount:	$ 20,000
Check, Money Order, Transaction Number, and/or ePay Voucher Number: *(below)*	
Check No. 10722405	
Paid Online:	☐ YES ☒ NO
Company Name on Check:	Chevron Phillips Chemical Company LP

Chevron Phillips Chem Co LP
Accounts Payable
The Woodlands, TX 77380

PAYEE NO.	DATE
59342	04/23/2020

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. BOX 13088
AUSTIN, TX 78711-3089

CHECK NO.	AMOUNT	DOCUMENT
10722405	$20,000.00	2100003007

INVOICE NUMBER	INVOICE DATE	DOCUMENT	GROSS	DISCOUNT	NET
04212020Q	04/21/20	331200004056 2020	20,000.00	0.00	20,000.00
CHEVRON PHILLIPS CHEMICAL COMPANY LP PERMIT AMENDMENT APPLICATION NSR 24620 EXPEDITE FEE					
		TOTAL	20,000.00	0.00	20,000.00

Chevron Phillips Chem Co LP
Accounts Payable
The Woodlands, TX 77380

JPMorgan Chase Bank, N.A.
New York, NY 10005, NY

60-937
313

Check Date: 04/23/2020
Check Number: 10722405

Pay In U.S. Dollars

TWENTY THOUSAND AND 00/100*******

*********20,000.00*

To The Order Of: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. BOX 13088
AUSTIN, TX 78711-3089

Michael C. Emmons

Treasurer

Chevron Phillips Chemical Company LP

Cedar Bayou Plant

9500 I-10 East, Exit 796
Baytown, Texas 77521-9570

Phone 281-421-6500
Fax 281-421-6272
E-mail www.cpchem.com

May 4, 2020

Federal Express

Air Permits Initial Review Team (MC-161)
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Re: Chevron Phillips Chemical Company LP
Cedar Bayou Plant
Permit No. 2462C Amendment
Baytown, Harris County
Regulated Entity No. RN103919817
Customer Reference No. CN600303614

Attn: APIRT

On behalf of Chevron Phillips Chemical LP (CPChem), I am submitting the attached expedited amendment application for Permit No. 2462C. This amendment authorizes changes to flare process controls and monitoring that will enable operation with a minimum net heating value in the combustion zone.

This submittal includes CONFIDENTIAL information which is segregated and clearly labeled. Please handle this information accordingly.

The required fee payment was previously submitted under separate cover to the TCEQ Cashier's Office.

If you have any questions regarding this application, please contact Mr. Oluwatobi "Tobi" Adeyinka at (281) 421-6285.

Sincerely,

Gregory Goodson
Environmental Superintendent

GG/

Enclosures

cc: Air Program Manager, Region 12, TCEQ, Houston, w/enclosures
Director, Harris County Public Health and Environmental Services, Pasadena, w/enclosures
Mr. Jason M. Graves, Waid Environmental, Houston, w/enclosures

Texas Commission on Environmental Quality
Permit No. 2462C Amendment Application

Chevron Phillips Chemical LP

Baytown, Harris County
Air Quality Account ID No. HG0310V
Regulated Entity No. RN103919817
Customer No. CN600303614

May 2020

Prepared and Approved by:

5/4/2020

Jason M. Graves, P.E.
Principal Engineer

Waid Corporation dba Waid Environmental
Certificate of Registration No. F-58

Document based on information provided by Chevron Phillips Chemical
Waid Project No. 14091.00

WAID ENVIRONMENTAL
www.waid.com

Austin Office
13785 Research Blvd., Suite 100, Austin, Texas 78750
512.255.9999 • 512.255.8780 FAX

Houston Office
1325 Space Park Dr., Suite D, Houston, Texas 77058
281.333.9990 • 512.255.8780 FAX

Texas Commission on Environmental Quality
Form PI-1 General Application
General

I. Applicant Information	
I acknowledge that I am submitting an authorized TCEQ application workbook and any necessary attachments. Except for inputting the requested data and adjusting row height and column width, I have not changed the TCEQ application workbook in any way, including but not limited to changing formulas, formatting, content, or protections.	I agree

A. Company Information

Company or Legal Name:	Chevron Phillips Chemical Company LP

Permits are issued to either the facility owner or operator, commonly referred to as the applicant or permit holder. List the legal name of the company, corporation, partnership, or person who is applying for the permit. We will verify the legal name with the Texas Secretary of State at (512) 463-5555 or at:

https://www.sos.state.tx.us

Texas Secretary of State Charter/Registration Number (if given):	

B. Company Official Contact Information: must not be a consultant

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Gregory
Last Name:	Goodson
Title:	Environmental Superintendent
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6879
Fax Number:	
Email Address:	cedraenviron@cpchem.com; GOODSGA@cpchem.com

C. Technical Contact Information: This person must have the authority to make binding agreements and representations on behalf of the applicant and may be a consultant. **Additional technical contact(s) can be provided in a cover letter.**

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Oluwatobi
Last Name:	Adeyinka
Title:	Environmental Engineer
Company or Legal Name:	Chevron Phillips Chemical LP
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6285
Fax Number:	
Email Address:	ADEYIO@cpchem.com

D. Assigned Numbers

The CN and RN below are assigned when a Core Data Form is initially submitted to the Central Registry. The RN is also assigned if the agency has conducted an investigation or if the agency has issued an enforcement action. If these numbers have not yet been assigned, leave these questions blank and include a Core Data Form with your application submittal. See Section VI.B. below for additional information.

Enter the CN. The CN is a unique number given to each business, governmental body, association, individual, or other entity that owns, operates, is responsible for, or is affiliated with a regulated entity.	CN600303614
Enter the RN. The RN is a unique agency assigned number given to each person, organization, place, or thing that is of environmental interest to us and where regulated activities will occur. The RN replaces existing air account numbers. The RN for portable units is assigned to the unit itself, and that same RN should be used when applying for authorization at a different location.	RN103919817

II. Delinquent Fees and Penalties

Does the applicant have unpaid delinquent fees and/or penalties owed to the TCEQ? This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ Web site at: https://www.tceq.texas.gov/agency/financial/fees/delin	No

III. Permit Information

A. Permit and Action Type **(multiple may be selected, leave no blanks)**

Additional information regarding the different NSR authorizations can be found at:
https://www.tceq.texas.gov/permitting/air/guidance/authorize.html

Select from the drop-down the type of action being requested for each permit type. **If that permit type does not apply, you MUST select "Not applicable".**

Provide all assigned permit numbers relevant for the project. Leave blank if the permit number has not yet been assigned.

Permit Type	**Action Type Requested** **(do not leave blank)**	**Permit Number (if assigned)**
Minor NSR (can be a Title V major source): *Not applicable, Initial, Amendment, Renewal, Renewal Certification, Renewal/Amendment, Relocation/Alteration, Change of Location, Alteration, Extension to Start of Construction*	Amendment	2462C
Special Permit: *Not applicable, Amendment, Renewal, Renewal Certification, Renewal/Amendment, Alteration, Extension to Start of Construction*	Not applicable	
De Minimis: *Not applicable, Initial*	Not applicable	
Flexible: *Not applicable, Initial, Amendment, Renewal, Renewal Certification, Renewal/Amendment, Alteration, Extension to Start of Construction*	Not applicable	
PSD: *Not applicable, Initial, Major Modification*	Not applicable	
Nonattainment: *Not applicable, Initial, Major Modification*	Major Modification	To be determined
HAP Major Source [FCAA § 112(g)]: *Not applicable, Initial, Major Modification*	Not applicable	

PAL: *Not applicable, Initial, Amendment, Renewal, Renewal/Amendment, Alteration*	Not applicable	
GHG PSD: *Not applicable, Initial, Major Modification, Voluntary Update*	Not applicable	

B. MSS Activities

How are/will MSS activities for sources associated with this project be authorized?	This permit

C. Consolidating NSR Permits

Will this permit be consolidated into another NSR permit with this action?	No
Will NSR permits be consolidated into this permit with this action?	No

D. Incorporation of Standard Permits, Standard Exemptions, and/or Permits By Rule (PBR)

To ensure protectiveness, previously issued authorizations (standard permits, standard exemptions, or PBRs) including those for MSS, are incorporated into a permit either by consolidation or by reference. At the time of renewal and/or amendment, consolidation (in some cases) may be voluntary and referencing is mandatory.More guidance regarding incorporation can be found in 30 TAC § 116.116(d)(2), 30 TAC § 116.615(3) and in this memo:

https://www.tceq.texas.gov/assets/public/permitting/air/memos/pbr_spc06.pdf

Are there any standard permits, standard exemptions, or PBRs to be incorporated by reference?	No
Are there any PBR, standard exemptions, or standard permits associated to be incorporated by consolidation? **Note:** Emission calculations, a BACT analysis, and an impacts analysis must be attached to this application at the time of submittal for any authorization to be incorporated by consolidation.	No

E. Associated Federal Operating Permits	
Is this facility located at a site required to obtain a **site operating permit (SOP)** or **general operating permit (GOP)?**	Yes
Is a **SOP** or **GOP** review pending for this source, area, or site?	Yes
If required to obtain a **SOP** or **GOP**, list all associated permit number(s). If no associated permit number has been assigned yet, enter "TBD":	O2115

IV. Facility Location and General Information	
A. Location	
County: Enter the county where the facility is physically located.	Harris
TCEQ Region	Region 12
County attainment status as of Sept. 23, 2019	Serious Ozone nonattainment
Street Address:	9500 I-10 East
City: If the address is not located in a city, then enter the city or town closest to the facility, even if it is not in the same county as the facility.	Baytown
ZIP Code: Include the ZIP Code of the physical facility site, not the ZIP Code of the applicant's mailing address.	77521
Site Location Description: If there is no street address, provide written driving directions to the site. Identify the location by distance and direction from well-known landmarks such as major highway intersections.	
Use USGS maps, county maps prepared by the Texas Department of Transportation, or an online software application such as Google Earth to find the latitude and longitude.	
Latitude (in degrees, minutes, and nearest second (DDD:MM:SS)) for the street address or the destination point of the driving directions. Latitude is the angular distance of a location north of the equator and will always be between 25 and 37 degrees north (N) in Texas.	29°49'03"N
Longitude (in degrees, minutes, and nearest second (DDD:MM:SS)) for the street address or the destination point of the driving directions. Longitude is the angular distance of a location west of the prime meridian and will always be between 93 and 107 degrees west (W) in Texas.	94°56'02"W
Is this a project for a lead smelter, concrete crushing facility, and/or a hazardous waste management facility?	No
B. General Information	
Site Name:	Cedar Bayou Plant
Area Name: Must indicate the general type of operation, process, equipment or facility. Include numerical designations, if appropriate. Examples are Sulfuric Acid Plant and No. 5 Steam Boiler. Vague names such as Chemical Plant are not acceptable.	Polyethylene Unit PEU-1792 Flare X-901

Are there any schools located within 3,000 feet of the site boundary?	No
C. Portable Facility	
Permanent or portable facility?	Permanent
D. Industry Type	
Principal Company Product/Business:	Organic Chemical Manufacturing
A list of SIC codes can be found at: https://www.naics.com/sic-codes-industry-drilldown/	
Principal SIC code:	2869
NAICS codes and conversions between NAICS and SIC Codes are available at: https://www.census.gov/eos/www/naics/	
Principal NAICS code:	325110
E. State Senator and Representative for this site	
This information can be found at (note, the website is not compatible to Internet Explorer): https://wrm.capitol.texas.gov/	
State Senator:	Brandon Creighton
District:	4
State Representative:	Briscoe Cain
District:	128

V. Project Information	
A. Description	
Provide a brief description of the project that is requested. (Limited to 500 characters).	This amendment authorizes changes to flare process monitoring and controls to optimize the addition of steam/air and supplemental natural gas which will support continued maintenance of the required net heating value in the combustion zone.
B. Project Timing	
Authorization must be obtained for many projects before beginning construction. Construction is broadly interpreted as anything other than site clearance or site preparation. Enter the date as "Month Date, Year" (e.g. July 4, 1776).	
Projected Start of Construction:	March 17, 2021
Projected Start of Operation:	June 15, 2021
C. Enforcement Projects	
Is this application in response to, or related to, an agency investigation, notice of violation, or enforcement action?	No
D. Operating Schedule	
Will sources in this project be authorized to operate 8760 hours per year?	Yes

VI. Application Materials	
All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. (30 TAC § 116.116)	
A. Confidential Application Materials	
Is confidential information submitted with this application?	Yes
If yes, is each confidential page marked "CONFIDENTIAL" in large red letters?	Yes
THSC §382.041 requires us not to disclose any information related to manufacturing processes that is marked Confidential. Mark any information related to secret or proprietary processes or methods of manufacture Confidential if you do not want this information in the public file. All confidential information should be separated from the application and submitted as a separate file. Additional information regarding confidential information can be found at: https://www.tceq.texas.gov/permitting/air/confidential.html	
B. Is the Core Data Form (Form 10400) attached?	No
https://www.tceq.texas.gov/assets/public/permitting/centralregistry/10400.docx	
C. Is a current area map attached?	Yes
Is the area map a current map with a true north arrow, an accurate scale, the entire plant property, the location of the property relative to prominent geographical features including, but not limited to, highways, roads, streams, and significant landmarks such as buildings, residences, schools, parks, hospitals, day care centers, and churches?	Yes
Does the map show a 3,000-foot radius from the property boundary?	Yes
D. Is a plot plan attached?	Yes
Does your plot plan clearly show a north arrow, an accurate scale, all property lines, all emission points, buildings, tanks, process vessels, other process equipment, and two bench mark locations?	Yes
Does your plot plan identify all emission points on the affected property, including all emission points authorized by other air authorizations, construction permits, PBRs, special permits, and standard permits?	Yes
Did you include a table of emission points indicating the authorization type and authorization identifier, such as a permit number, registration number, or rule citation under which each emission point is currently authorized?	Yes
E. Is a process flow diagram attached?	Yes
Is the process flow diagram sufficiently descriptive so the permit reviewer can determine the raw materials to be used in the process; all major processing steps and major equipment items; individual emission points associated with each process step; the location and identification of all emission abatement devices; and the location and identification of all waste streams (including wastewater streams that may have associated air emissions)?	Yes
F. Is a process description attached?	Yes
Does the process description emphasize where the emissions are generated, why the emissions must be generated, what air pollution controls are used (including process design features that minimize emissions), and where the emissions enter the atmosphere?	Yes
Does the process description also explain how the facility or facilities will be operating when the maximum possible emissions are produced?	Yes
G. Are detailed calculations attached? Calculations must be provided for each source with new or changing emission rates. For example, a new source, changing emission factors, decreasing emissions, consolidated sources, etc. You do not need to submit calculations for sources which are not changing emission rates with this project. Please note: the preferred format is an electronic workbook (such as Excel) with all formulas viewable for review. It can be emailed with the submittal of this application workbook.	Yes
Are emission rates and associated calculations for planned MSS facilities and related activities attached?	Yes

H. Is a material balance (Table 2, Form 10155) attached?	N/A
I. Is a list of MSS activities attached?	Yes
Are the MSS activities listed and discussed separately, each complete with the authorization mechanism or emission rates, frequency, duration, and supporting information if authorized by this permit?	Yes
J. Is a discussion of state regulatory requirements attached, addressing 30 TAC Chapters 101, 111, 112, 113, 115, and 117?	Yes
For all applicable chapters, does the discussion include how the facility will comply with the requirements of the chapter?	Yes
For all not applicable chapters, does the discussion include why the chapter is not applicable?	Yes
K. Are all other required tables, calculations, and descriptions attached?	Yes

VII. Signature

The owner or operator of the facility must apply for authority to construct. The appropriate company official (owner, plant manager, president, vice president, or environmental director) must sign all copies of the application. The applicant's consultant cannot sign the application. **Important Note: Signatures must be original in ink, not reproduced by photocopy, fax, or other means, and must be received before any permit is issued.**

The signature below confirms that I have knowledge of the facts included in this application and that these facts are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project for which application is made will not in any way violate any provision of the Texas Water Code (TWC), Chapter 7; the Texas Health and Safety Code, Chapter 382; the Texas Clean Air Act (TCAA); the air quality rules of the Texas Commission on Environmental Quality; or any local governmental ordinance or resolution enacted pursuant to the TCAA. I further state that I understand my signature indicates that this application meets all applicable nonattainment, prevention of significant deterioration, or major source of hazardous air pollutant permitting requirements. The signature further signifies awareness that intentionally or knowingly making or causing to be made false material statements or representations in the application is a criminal offense subject to criminal penalties.

Name:	Gregory Goodson
Signature:	
	Original signature is required.
Date:	May 4, 2020

V. Nonattainment Permits	
Complete the offsets section of the Federal Applicability sheet of this workbook.	Yes
Does the application contain a detailed LAER analysis? (attachment or as notes on the BACT sheet of this workbook)	Yes
Does the application contain an analysis of alternative sites, sizes, production processes, and control techniques for the proposed source? The analysis must demonstrate that the benefits of the proposed location and source configuration significantly outweigh the environmental and social costs of that locati+A124on.	Yes

VIII. Federal Regulatory Questions	
Indicate if any of the following requirements apply to the proposed facility. Note that some federal regulations apply to minor sources. Enter all applicable Subparts.	
A. Title 40 CFR Part 60	
Do NSPS subpart(s) apply to a facility in this application?	Yes
List applicable subparts you will demonstrate compliance with (e.g. Subpart M)	Subparts A and DDD
B. Title 40 CFR Part 61	
Do NESHAP subpart(s) apply to a facility in this application?	No
C. Title 40 CFR Part 63	
Do MACT subpart(s) apply to a facility in this application?	Yes
List applicable subparts you will demonstrate compliance with (e.g. Subpart VVVV)	Subparts A, FFFF, UU, ZZZZ, and DDDDD

IX. Emissions Review	
A. Impacts Analysis	
Any change that results in an increase in off-property concentrations of air contaminants requires an air quality impacts demonstration. Information regarding the air quality impacts demonstration must be provided with the application and show compliance with all state and federal requirements. Detailed requirements for the information necessary to make the demonstration are listed on the Impacts sheet of this workbook.	
Does this project require an impacts analysis?	Yes
B. Disaster Review	
If the proposed facility will handle sufficient quantities of certain chemicals which, if released accidentally, would cause off-property impacts that could be immediately dangerous to life and health, a disaster review analysis may be required as part of the application. Contact the appropriate NSR permitting section for assistance at (512) 239-1250. Additional Guidance can be found at: https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/disrev-factsheet.pdf	
Does this application involve any air contaminants for which a disaster review is required?	No
C. Air Pollutant Watch List	
Certain areas of the state have concentrations of specific pollutants that are of concern. The TCEQ has designated these portions of the state as watch list areas. Location of a facility in a watch list area could result in additional restrictions on emissions of the affected air pollutant(s) or additional permit requirements. The location of the areas and pollutants of interest can be found at: https://www.tceq.texas.gov/toxicology/apwl/apwl.html	
Is the proposed facility located in a watch list area?	No

D. Mass Emissions Cap and Trade	
Is this facility located at a site within the Houston/Galveston nonattainment area (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties)?	Yes
Is Mass Emissions Cap and Trade applicable to the new or modified facilities?	No

X. Additional Requirements	
A. Bulk Fuel Terminals	
Is this project for a bulk fuel terminal?	No
B. Plant Fuel Gas Facilities	
Does this site utilize plant fuel gas?	No

Texas Commission on Environmental Quality
Form PI-1 General Application
Unit Types - Emission Rates

Permit primary industry (must be selected for workbook to function)	Chemical / Energy

Action Requested (only 1 action per FIN)	Include these emissions in annual (tpy) summary?	Facility ID Number (FIN)	Emission Point Number (EPN)	Source Name	Pollutant	Current Short-Term (lb/hr)	Current Long-Term (tpy)	Consolidated Current Short-Term (lb/hr)	Consolidated Current Long-Term (tpy)	Proposed Short-Term (lb/hr)	Proposed Long-Term (tpy)	Short-Term Difference (lb/hr)	Long-Term Difference (tpy)	Unit Type (Used for reviewing BACT and Monitoring Requirements)	Unit Type Notes (only if "other" unit type in Column O)
New/Modified	Yes	P-1792 (F)	F-75	Process Fugitives (8)	VOC	13.42	58.78			13.5	59.12	*0.0801*	*0.34*	Fugitives: Piping and Equipment Leak	
Not New/Modified	No	P-1792	F04	Pellet Losses (8)	VOC	52.3	78.3			52.3	78.3	0	0	Process Vent	
Not New/Modified	No	P-1792	F-05	Catalyst Mix and Holding tanks (8)	VOC	1.89	0.2			1.89	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	G-217	1592-42	Holding Pond	VOC	0.01	0.01			0.01	0.01	0	0	Other	Stormwater pond
Not New/Modified	No	F-355	25	F-355 Bagfilter	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-376	1792-4C	F-376 Baghouse	PM	0.02	0.05			0.02	0.05	0	0	Control: Bag Filter/Baghouse	
					PM10	0.02	0.05			0.02	0.05	0	0		
					PM2.5	0.02	0.05			0.02	0.05	0	0		
Not New/Modified	No	F-365	1792-4F	F-365 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-366	1792-4G	F-366 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-367	1792-4H	F-367 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-356	1792-4J	F-356 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-394	1792-15	F-394 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-395	1792-16	F-395 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-396	1792-17	F-396 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-397	1792-18	F-397 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-312	1792-21	F-312 Bagfilter	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-315	1792-22	F-315 Bagfilter	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-320	1792-23	F-320 Baghouse	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	U-450	1792-ENG2	U-450 Electric Power Generator Engine (9)	VOC	0.24	0.01			0.24	0.01	0	0	Engine: Emergency, Diesel	
					NOx	0.83	0.04			0.83	0.04	0	0		
					CO	4.34	0.22			4.34	0.22	0	0		
					SO2	0.01	<0.01			0.01	<0.01	0	0		
					PM	0.04	<0.01			0.04	<0.01	0	0		
					PM10	0.04	<0.01			0.04	<0.01	0	0		
					PM2.5	0.04	<0.01			0.04	<0.01	0	0		
Not New/Modified	No	F-398	1792-B1	F-398, Baghouse -Silo Loadout (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-399	1792-B2	F-399, Baghouse -Silo Loadout (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-400	1792-B3	F-400, Baghouse - Stripped Product Silos (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-401	1792-B4	F-401, Baghouse - Stripped Product Silos (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-402	1792-B5	F-402, Baghouse - Stripped Product Silos (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	F-403	1792-B6	F-403, Baghouse - Stripped Product Silos (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		

Texas Commission on Environmental Quality
Form PI-1 General Application
Unit Types - Emission Rates

Action Requested (only 1 action per FIN)	Include these emissions in annual (tpy) summary?	Facility ID Number (FIN)	Emission Point Number (EPN)	Source Name	Pollutant	Current Short-Term (lb/hr)	Current Long-Term (tpy)	Consolidated Current Short-Term (lb/hr)	Consolidated Current Long-Term (tpy)	Proposed Short-Term (lb/hr)	Proposed Long-Term (tpy)	Short-Term Difference (lb/hr)	Long-Term Difference (tpy)	Unit Type (Used for reviewing BACT and Monitoring Requirements)	Unit Type Notes (only if "other" unit type in Column O)
Not New/Modified	No	F-404	1792-B7	F-404, Baghouse - Stripped Product Silos (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
Not New/Modified	No	H-602	26	H-602 Hot Oil Heater	VOC	0.12	0.43			0.12	0.43	0	0	Heater	
					NOx	1.32	2.87			1.32	2.87	0	0		
					CO	1.8	6.5			1.8	6.5	0	0		
					SO2	0.01	0.05			0.01	0.05	0	0		
					PM	0.16	0.59			0.16	0.59	0	0		
					PM10	0.16	0.59			0.16	0.59	0	0		
					PM2.5	0.16	0.59			0.16	0.59	0	0		
New/Modified	Yes	P-1792	45	X-901 Flare Operations (8)	VOC	87.3	9.27			87.43	9.79	*0.1301*	*0.52*	Control: Flare	
					NOx	14.09	2.76			15.69	9.33	*1.6*	*6.57*		
					CO	72.45	19.92			80.59	53.41	*8.14*	*33.49*		
					SO2	0.04	0.03			0.18	0.61	*0.14*	*0.58*		
Not New/Modified	No	H-3030	1792-4B	H-3030 Catalytic Oxidizer (8)	VOC	3.12	9.85			3.12	9.85	0	0	Control: Oxidizer: Catalytic	
					NOx	1.11	4.86			1.11	4.86	0	0		
					CO	5.55	24.3			5.55	24.3	0	0		
					SO2	0.01	0.03			0.01	0.03	0	0		
					PM	0.09	0.12			0.09	0.12	0	0		
					PM10	0.09	0.12			0.09	0.12	0	0		
					PM2.5	0.09	0.12			0.09	0.12	0	0		
Not New/Modified	No	H-3030	1792-4M	Downtime of H-3030 (8)	VOC	35	3.36			35	3.36	0	0	MSS Activities	
Not New/Modified	No	B-112	1792-35	Line 1 Pellet Dryer(8)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	No	B-113	1792-36	Line 2 Pellet Dryer (8)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	No	B-114	1792-37	Line 3 Pellet Dryer (8)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	No	B-115	1792-38	Line 4 Pellet Dryer (8)	VOC	0.68	2.99			0.68	2.99	0	0	Polyethylene Facilities	
Not New/Modified	No	B-1506	1792-39	Line 5 Pellet Dryer (8)	VOC	0.89	3.88			0.89	3.88	0	0	Polyethylene Facilities	
Not New/Modified	No	B-1606	1792-40	Line 6 Pellet Dryer (8)	VOC	0.89	3.88			0.89	3.88	0	0	Polyethylene Facilities	
Not New/Modified	No	U-905	1792-41	U-905 Electric Power Generator Engine	VOC	0.85	0.02			0.85	0.02	0	0	Engine: Emergency, Diesel	
					NOx	10.54	0.27			10.54	0.27	0	0		
					CO	2.27	0.06			2.27	0.06	0	0		
					SO2	0.7	0.02			0.7	0.02	0	0		
					PM	0.75	0.02			0.75	0.02	0	0		
					PM10	0.75	0.02			0.75	0.02	0	0		
					PM2.5	0.75	0.02			0.75	0.02	0	0		
Not New/Modified	No	P-930	1792-43	P-930 Stormwater Pump Engine	VOC	0.56	0.02			0.56	0.02	0	0	Engine: Emergency, Diesel	
					NOx	6.98	0.29			6.98	0.29	0	0		
					CO	1.5	0.06			1.5	0.06	0	0		
					SO2	0.46	0.02			0.46	0.02	0	0		
					PM	0.5	0.02			0.5	0.02	0	0		
					PM10	0.5	0.02			0.5	0.02	0	0		
					PM2.5	0.5	0.02			0.5	0.02	0	0		
Not New/Modified	No	E-502	1792-76	Cooling Tower (8)	VOC	1.58	1.65			1.58	1.65	0	0	Cooling Tower	
					PM	0.38	1.66			0.38	1.66	0	0		
					PM10	0.38	1.66			0.38	1.66	0	0		
					PM2.5	0.38	1.66			0.38	1.66	0	0		
Not New/Modified	No	P-1792	LL03	Slop Oil Loading (8)	VOC	3.16	0.08			3.16	0.08	0	0	Loading: Truck	
Not New/Modified	No	TK-902	03	Spent Solvent Tank (8)	VOC	3.06	0.09			3.06	0.09	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	TK-402	28	Solvent Rundown Tank (8)	VOC	3.24	0.04			3.24	0.04	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	TK-401	29	Solvent Holding Tank	VOC	3.24	0.08			3.24	0.08	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	TK-405	30	Methanol Tank (8)	VOC	17.29	0.26			17.29	0.26	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	V-912	1792-11	Solvent Storage Tank (8)	VOC	3.24	0.18			3.24	0.18	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	TK-903	1792-47	API Skim Tank	VOC	1.01	0.2			1.01	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	V-430	31	Chilled Water Methanol (8)	VOC	1.44	0.2			1.44	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	V-905	1792-42	Diesel Fuel Tank	VOC	0.29	0.02			0.29	0.02	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	V-930	1792-44	Diesel Fuel Tank	VOC	0.29	0.02			0.29	0.02	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	TK-904	1792-45	Stormwater Holding Tank	VOC	0.14	0.02			0.14	0.02	0	0	Other	Stormwater Equipment
Not New/Modified	No	G-214	1792-46	API Separator	VOC	0.58	2.54			0.58	2.54	0	0	Wastewater Facilities	
Not New/Modified	No	G-212	1792-48	Stormwater Holding Pond	VOC	0.01	0.01			0.01	0.01	0	0	Other	Stormwater Equipment

Texas Commission on Environmental Quality
Form PI-1 General Application
Unit Types - Emission Rates

Action Requested (only 1 action per FIN)	Include these emissions in annual (tpy) summary?	Facility ID Number (FIN)	Emission Point Number (EPN)	Source Name	Pollutant	Current Short-Term (lb/hr)	Current Long-Term (tpy)	Consolidated Current Short-Term (lb/hr)	Consolidated Current Long-Term (tpy)	Proposed Short-Term (lb/hr)	Proposed Long-Term (tpy)	Short-Term Difference (lb/hr)	Long-Term Difference (tpy)	Unit Type (Used for reviewing BACT and Monitoring Requirements)	Unit Type Notes (only if "other" unit type in Column O)
Not New/Modified	No	P-1792	1792-50	De-ethanizer Blowdown Drum	VOC	1.62	0.59			1.62	0.59	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	P-1792	1792-51	Depropanizer Blowdown Drum	VOC	1.62	0.59			1.62	0.59	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	P-1792	F-75	Process Fugitives (9)	VOC	13.42	58.75			13.42	58.75	0	0	Fugitives: Piping and Equipment Leak	
Not New/Modified	No	P-1792	F04	Pellet Losses (9)	VOC	52.3				52.3		0	0	Polyethylene Facilities	
Not New/Modified	No	P-1792	F-05	Catalyst Mix and Holding tanks (9)	VOC	1.89	0.2			1.89	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	F-355	25	F-355 Bagfilter (9)	PM	0.01	0.02			0.01	0.02	0	0	Control: Bag Filter/Baghouse	
					PM10	0.01	0.02			0.01	0.02	0	0		
					PM2.5	0.01	0.02			0.01	0.02	0	0		
New/Modified	No	P-1792	45	X-901 Flare Operations (9)	VOC	87.3	9.27			87.43	9.79	*0.1301*	*0.52*	Control: Flare	
					NOx	14.09	2.76			15.69	9.33	*1.6*	*6.57*		
					CO	72.45	19.92			80.59	53.41	*8.14*	*33.49*		
					SO2	0.04	0.03			0.18	0.61	*0.14*	*0.58*		
Not New/Modified	No	H-3030	1792-4M	H-3030 Catalytic Oxidizer (9)	VOC	3.12	9.85			3.12	9.85	0	0	Control: Oxidizer: Catalytic	
					NOx	1.11	4.86			1.11	4.86	0	0		
					CO	5.55	24.3			5.55	24.3	0	0		
					SO2	0.01	0.03			0.01	0.03	0	0		
					PM	0.09	0.12			0.09	0.12	0	0		
					PM10	0.09	0.12			0.09	0.12	0	0		
					PM2.5	0.09	0.12			0.09	0.12	0	0		
Not New/Modified	No	H-3030	1792-4B	Downtime of H-3030 (9)	VOC	35	3.36			35	3.36	0	0	MSS Activities	
Not New/Modified	No	ROX-1	ROX-1	ROX-1, Oxidizer (9)	VOC	3.12	9.85			3.12	9.85	0	0	Control: Oxidizer: Thermal	
					NOx	1.11	4.86			1.11	4.86	0	0		
					CO	5.55	24.3			5.55	24.3	0	0		
					SO2	0.01	0.03			0.01	0.03	0	0		
					PM	0.09	0.12			0.09	0.12	0	0		
					PM10	0.09	0.12			0.09	0.12	0	0		
					PM2.5	0.09	0.12			0.09	0.12	0	0		
Not New/Modified	No	ROX-DT	ROX-DT	Downtime of ROX-1 (9)	VOC	35	3.36			35	3.36	0	0	MSS Activities	
					PM							0	0		
					PM10							0	0		
					PM2.5							0	0		
Not New/Modified	No	B-112	1792-35	Line 1 Pellet Dryer (9)	VOC	0.68				0.68		0	0	Polyethylene Facilities	
Not New/Modified	No	B-113	1792-36	Line 2 Pellet Dryer (9)	VOC	0.68				0.68		0	0	Polyethylene Facilities	
Not New/Modified	No	B-114	1792-37	Line 3 Pellet Dryer (9)	VOC	0.68				0.68		0	0	Polyethylene Facilities	
Not New/Modified	No	B-115	1792-38	Line 4 Pellet Dryer (9)	VOC	0.68				0.68		0	0	Polyethylene Facilities	
Not New/Modified	No	B-1506	1792-39	Line 5 Pellet Dryer (9)	VOC	0.89				0.89		0	0	Polyethylene Facilities	
Not New/Modified	No	B-1606	1792-40	Line 6 Pellet Dryer (9)	VOC	0.89				0.89		0	0	Polyethylene Facilities	
Not New/Modified	No	P-1792, B-112, B-113, B-114, B-115, B-1506, B-1606	PELLET	Includes EPNs F-04, 1792-35, 1792-36, 1792-37, 1792-38, 1792-39, 1792-40	VOC		98.02				98.02	0	0	Polyethylene Facilities	
Not New/Modified	No	GRP-DRYERS	GRP-DRYERS	Pellet Dryers (9)	VOC	12	25			12	25	0	0	Polyethylene Facilities	
Not New/Modified	No	E-502	1792-76	Cooling Tower (9)	VOC	1.58	1.65			1.58	1.65	0	0	Cooling Tower	
					PM	0.38	1.66			0.38	1.66	0	0		
					PM10	0.38	1.66			0.38	1.66	0	0		
					PM2.5	0.38	1.66			0.38	1.66	0	0		
Not New/Modified	No	E-503	1792-77	Cooling Tower	VOC	0.25	0.26			0.25	0.26	0	0	Cooling Tower	
					PM	0.06	0.26			0.06	0.26	0	0		
					PM10	0.06	0.26			0.06	0.26	0	0		
					PM2.5	0.06	0.26			0.06	0.26	0	0		
Not New/Modified	No	P-1792	LL03	Slop Oil Loading (9)	VOC	3.16	0.08			3.16	0.08	0	0	Loading: Truck	
Not New/Modified	No	TK-902	03	Spent Solvent Tank (9)	VOC	3.06	0.09			3.06	0.09	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	V-912	1792-11	Solvent Storage Tank (9)	VOC	3.24	0.18			3.24	0.18	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	V-430	31	Chilled Water Methanol (9)	VOC	1.44	0.2			1.44	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	V-430b	31b	V-430B, Chilled Water Methanol (9)	VOC	1.44	0.2			1.44	0.2	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	TK-402	28	Solvent Rundown Tank (9)	VOC	3.24	0.04			3.24	0.04	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	
Not New/Modified	No	TK-405	30	Methanol Tank (9)	VOC	17.29	0.26			17.29	0.26	0	0	Storage Tank (1): Fixed roof with capacity < 25,000 gal or TVP < 0.50 psia	

Emission Point Discharge Parameters												
EPN	Included in EMEW?	UTM Coordinates Zone	East (Meters)	North (Meters)	Building Height (ft)	Height Above Ground (ft)	Stack Exit Diameter (ft)	Velocity (FPS)	Temperature (°F)	Fugitives - Length (ft)	Fugitives - Width (ft)	Fugitives - Axis Degrees
F-75	Yes											
F04	No	15	313972	3300591						120	50	90
F-05	No	15	314000	3301020		15				750	250	90
1592-42	No	15	314748	3301219								
25	No	15	314038	3300892	0	25	1	161	100			
1792-4C	No	15	314080	3300830	10	28	0.067	44.78	Amb.			
1792-4F	No	15	314060	3300790	0	20	0.067	44.78	Amb.			
1792-4G	No	15	314045	3300790	0	20	0.067	44.78	Amb.			
1792-4H	No	15	314035	3300790	0	20	0.067	44.78	Amb.			
1792-4J	No	15	314010	3300790	0	20	0.067	44.78	Amb.			
1792-15	No	15	314020	3300800	0	20	0.067	44.78	Amb.			
1792-16	No	15	314025	3300800	0	20	0.067	44.78	Amb.			
1792-17	No	15	314015	3300800	0	20	0.067	44.78	Amb.			
1792-18	No	15	314160	3300800	0	20	0.067	44.78	Amb.			
1792-21	No	15	314028	3300670	0	20	0.067	44.78	Amb.			
1792-22	No	15	314026	3300850	0	20	0.067	44.78	Amb.			
1792-23	No	15	314515	3300900	0	20	0.067	44.78	Amb.			
1792-ENG2	No	15	314180	3301150	0	15	0.5	153	950			
1792-B1	No	15	313993	3300775								
1792-B2	No	15	314001	3300775								
1792-B3	No	15	314009	3300775								
1792-B4	No	15	314017	3300775								
1792-B5	No	15	314025	3300775								
1792-B6	No	15	314033	3300775								
1792-B7	No	15	314040	3300775								
26	No	15	313920	3300900	25	62	3	7.36	850			
45	Yes											
1792-4B	No	15	314140	3300840	0	35	2.5	42	450			
1792-4M	No	15	314144	3300868	0	40	1.67	123	100			
1792-35	No	15	313970	3301310	0	4	1.13	63.8	70			
1792-36	No	15	314001	3301315	0	4	1.22	54.7	70			
1792-37	No	15	314031	3301320	0	4	1.22	54.7	70			
1792-38	No	15	314057	3301322	0	4	1.22	54.7	70			
1792-39	No	15	313892	3301080	0	4	1	85	70			
1792-40	No	15	313853	3301080	0	4	1	85	70			
1792-41	No	15	314180	3301150	0	15	0.5	153	950			
1792-43	No	15	314205	3301070	0	6	0.25	289	950			
1792-76	No	15	314000	3300950	0	40	22	0.003	Amb.			
LL03	No	15	314200	3301060	0	10	2	0.08	70			
03	No	15	314300	3300700	0	12	0.01	0.01	Amb.			
28	No	15	314062	3301015	0	12	0.01	0.01	Amb.			
29	No	15	314053	3301015	0	18	0.01	0.01	Amb.			
30	No	15	314121	3300948	0	16	0.01	0.01	Amb.			
1792-11	No	15	313810	3300810	0	12	0.01	0.01	Amb.			

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Stack Parameters

EPN	Included in EMEW?	UTM Coordinates Zone	East (Meters)	North (Meters)	Building Height (ft)	Height Above Ground (ft)	Stack Exit Diameter (ft)	Velocity (FPS)	Temperature (°F)	Fugitives - Length (ft)	Fugitives - Width (ft)	Fugitives - Axis Degrees
1792-47	No	15	314230	3301070	0	10	0.01	0.01	Amb.			
31	No	15	314062	3300985	0	12	0.18	0.4	75			
1792-42	No	15	314167	3301133	0	10	0.01	0.01	Amb.			
1792-44	No	15	314205	3301070	0	10	0.01	0.01	Amb.			
1792-45	No	15	314270	3301100	0	30	0.01	0.01	Amb.			
1792-46	No	15	314200	3301070								
1792-48	No	15	314200	3301270								
1792-50	No	15	314050	3301167	3	3	0.2		Amb.			
1792-51	No	15	314056	3301168	3	3	0.2		Amb.			
ROX-1	No	15	314140	3300840	0	35	2.5	42	450			
ROX-DT	No	15	314140	3300840	0	35	2.5	42	450			
PELLET	No	15	313970	3301310			3.28	0.003	Amb.	800		
GRP-DRYERS	No	15	313970	3301310	0	20	1.13	63.8	70			
1792-77	No	15	313736	3301228	0	40	22	0.003	Amb.			
31b	No	15	314032	3301186	0	12	0.18	0.4	75			

I. Public Notice Applicability

A. Application Type

Is this an application for a new or major modification of a PSD (including GHG), Nonattainment, or HAP permit?	Yes
Is this an application for a minor permit amendment?	Yes
Is there any change in character of emissions in this application (a new criteria pollutant or a new VOC or PM species)?	No
Is there a new air contaminant in this application?	No

B. Project Increases and Public Notice Thresholds (for Initial and Amendment Projects)

For public notice applicability, the agency does not include consolidation or incorporation of any previously authorized facility or activity (PBR, standard permits, etc.), changes to permitted allowable emission rates when exclusively due to changes to standardized emission factors, or reductions in emissions which are not enforceable through the amended permit. Thus, the total emissions increase would be the sum of emissions increases under the amended permit and the emissions decreases under the amended permit for each air contaminant.

The table below will generate emission increases based on the values represented on the "Unit Types - Emission Rates" sheet. Use the "yes" and "no" options in column B of the "Unit Types - Emission Rates" worksheet to indicate if a unit's proposed change of emissions should be included in these totals.

Notes:

1. Emissions of PM, PM10, and/or PM2.5 may have been previously quantified and authorized as PM, PM10,and/or PM2.5. These emissions will be speciated based on current guidance and policy to demonstrate compliance with current standards and public notice requirements may change during the permit review.

2. All renewals require public notice.

This row is optional. If you do not think the table below accurately represents public notice applicability increases for your project, provide discussion here (1000 characters).	
Do the facilities handle, load, unload, dry, manufacture, or process grain, seed, legumes, or vegetable fibers (agricultural facilities)?	

Pollutant	Current Long-Term (tpy)	Consolidated Emissions (tpy)	Proposed Long-Term (tpy)	Project Change in Allowable (tpy)	PN Threshold	Notice required?
VOC	68.05	0.00	68.91	0.86	5	No
PM	0.00	0.00	0.00	0.00	5	No
PM_{10}	0.00	0.00	0.00	0.00	5	No
$PM_{2.5}$	0.00	0.00	0.00	0.00	5	No
NO_x	2.76	0.00	9.33	6.57	5	Yes
CO	19.92	0.00	53.41	33.49	50	No
SO_2	0.03	0.00	0.61	0.58	10	No
Pb	0.00	0.00	0.00	0.00	0.6	No

* Notice is required for PM, PM10, and PM2.5 if one of these pollutants is above the threshold.

** Notice of a GHG action is determined by action type. Initial and major modification always require notice. Voluntary updates require a consolidated notice if there is a change to BACT. Project emission increases of CO2e (CO2 equivalent) are not relevant for determining public notice of GHG permit actions.

C. Is public notice required for this project as represented in this workbook? If no, proceed to Section III Small Business Classification. Note: public notice applicability for this project may change throughout the technical review.	Yes
D. Are any HAPs to be authorized/re-authorized with this project? The category "HAPs" must be specifically listed in the public notice if the project authorizes (reauthorizes for renewals) any HAP pollutants.	No

II. Public Notice Information

Complete this section if public notice is required (determined in the above section) or if you are not sure if public notice is required.

A. Contact Information

Enter the contact information for the **person responsible for publishing.** This is a designated representative who is responsible for ensuring public notice is properly published in the appropriate newspaper and signs are posted at the facility site. This person will be contacted directly when the TCEQ is ready to authorize public notice for the application.

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Gregory
Last Name:	Goodson
Title:	Environmental Superintendent
Company Name:	Chevron Phillips Chemical Company LP
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6879
Fax Number:	
Email Address:	GOODSGA@CPCHEM.COM

Enter the contact information for the **Technical Contact.** This is the designated representative who will be listed in the public notice as a contact for additional information.

Prefix (Mr., Ms., Dr., etc.):	Mr.
First Name:	Oluwatobi
Last Name:	Adeyinka
Title:	Environmental Engineer
Company Name:	Chevron Phillips Chemical LP
Mailing Address:	9500 I-10 East
Address Line 2:	
City:	Baytown
State:	Texas
ZIP Code:	77521
Telephone Number:	281-421-6285
Fax Number:	
Email Address:	ADEYIO@cpchem.com

B. Public place

Place a copy of the full application (including all of this workbook and all attachments) at a public place in the county where the facilities are or will be located. You must state where in the county the application will be available for public review and comment. The location must be a public place and described in the notice. A public place is a location which is owned and operated by public funds (such as libraries, county courthouses, city halls) and cannot be a commercial enterprise. You are required to pre-arrange this availability with the public place indicated below. The application must remain available from the first day of publication through the designated comment period.

If this is an application for a PSD, nonattainment, or FCAA §112(g) permit, the public place must have internet access available for the public as required in 30 TAC § 39.411(f)(3).

If the application is submitted to the agency with information marked as Confidential, you are required to indicate which specific portions of the application are not being made available to the public. These portions of the application must be accompanied with the following statement: ***Any request for portions of this application that are marked as confidential must be submitted in writing, pursuant to the Public Information Act, to the TCEQ Public Information Coordinator, MC 197, P.O. Box 13087, Austin, Texas 78711-3087.***

Name of Public Place:	TXPublicNotice.com and Sterling Municipal Library
Physical Address:	1 Mary Elizabeth Wilbanks Avenue
Address Line 2:	
City:	Baytown
ZIP Code:	77520
County:	Harris
Has the public place granted authorization to place the application for public viewing and copying?	Yes
Does the public place have Internet access available for the public?	Yes

C. Alternate Language Publication

In some cases, public notice in an alternate language is required. If an elementary or middle school nearest to the facility is in a school district required by the Texas Education Code to have a bilingual program, a bilingual notice will be required. If there is no bilingual program required in the school nearest the facility, but children who would normally attend those schools are eligible to attend bilingual programs elsewhere in the school district, the bilingual notice will also be required. If it is determined that alternate language notice is required, you are responsible for ensuring that the publication in the alternate language is complete and accurate in that language.

Is a bilingual program required by the Texas Education Code in the School District?	Yes
Are the children who attend either the elementary school or the middle school closest to your facility eligible to be enrolled in a bilingual program provided by the district?	Yes
If yes to either question above, list which language(s) are required by the bilingual program?	Spanish

D. PSD and Nonattainment Permits Only	
If this is an application for emissions of GHGs, select either "Separate Public Notice" or "Consolidated Public Notice". Note: Separate public notices requires a separate application.	Not applicable
We must notify the applicable county judge and presiding officer when a PSD or Nonattainment permit or modification application is received. This information can be obtained at: https://www.txdirectory.com	
Provide the information for the **County Judge** for the location where the facility is or will be located.	
The Honorable:	Lina Hidalgo
Mailing Address:	1001 Preston, Suite 911
Address Line 2:	
City:	Houston
State:	Texas
ZIP Code:	77002
Provide the information for the **Presiding Officer(s)** of the municipality for this facility site. This is frequently the Mayor.	
First Name:	Brandon
Last Name:	Capetillo
Title:	Mayor
Mailing Address:	2401 Market St.
Address Line 2:	
City:	Baytown
State:	TX
ZIP Code:	77520
Are the proposed facilities located within 100 km or less of an affected state or Class I Area?	No

III. Small Business Classification	
Complete this section to determine small business classification. If a small business requests a permit, agency rules (30 TAC § 39.603(f)(1)(A)) allow for alternative public notification requirements if all of the following criteria are met. If these requirements are met, public notice does not have to include publication of the prominent (12 square inch) newspaper notice.	
Does the company (including parent companies and subsidiary companies) have fewer than 100 employees or less than $6 million in annual gross receipts?	No
Small business classification:	**No**

I. County Classification	
Does the project require retrospective review?	No
County (completed for you from your response on the General sheet)	Harris
This project will be located in an area that is in serious nonattainment for ozone as of Sept. 23, 2019. Select from the drop-down list to the right if you would like the project to be reviewed under a different classification.	Ozone - Serious
Determination:	**This project will be located in a county with a Serious Ozone nonattainment classification, and the project will be reviewed under a Serious Ozone nonattainment classification. Complete the nonattainment section below and provide an analysis with the application.**

II. PSD and GHG PSD Applicability Summary			
Is netting required for the PSD analysis for this project?			**No**
Pollutant	**Project Increase**	**Threshold**	**PSD Review Required?**
CO	79.66	100	No
NO_x	15.54	25	No
PM	0	25	No
PM_{10}	0	15	No
$PM_{2.5}$	0	10	No
SO_2	1.37	40	No
Pb			
H_2S			
TRS			
Reduced sulfur compounds (including H_2S)			
H_2SO_4			
Fluoride (excluding HF)			
CO2e			

III. Nonattainment Applicability Summary			
Is netting required for the nonattainment analysis for this project?			**Yes**
If yes, the project increases listed below should be after netting has been performed. Attach the netting information to the application.			
Pollutant	**Project Increase (after netting)**	**Threshold**	**NA Review Required?**
Ozone (as VOC)	3.64	5	No
Ozone (as NO_x)	15.54	5	Yes

IV. Offset Summary (for Nonattainment Permits)			
Pollutant	**Offset Ratio**	**Offset Quantity Required (tpy)**	**Where is the offset coming from?**
Ozone (as NO_x)	1.20 : 1	18.648	NOX ERCs

I. General Information - Non-Renewal	
Is this project for new facilities controlled and operated directly by the federal government? (30 TAC § 116.141(b)(1) and 30 TAC § 116.163(a))	No
A fee of $75,000 shall be required if no estimate of capital project cost is included with the permit application. (30 TAC § 116.141(d)) Select "yes" here to use this option. Then skip sections II and III.	No
Select Application Type	Major Application

II. Direct Costs - Non-Renewal	
Type of Cost	**Amount**
Process and control equipment not previously owned by the applicant and not currently authorized under this chapter.	$27,000.00
Auxiliary equipment, including exhaust hoods, ducting, fans, pumps, piping, conveyors, stacks, storage tanks, waste disposal facilities, and air pollution control equipment specifically needed to meet permit and regulation requirements.	$62,000.00
Freight charges.	$4,000.00
Site preparation, including demolition, construction of fences, outdoor lighting, road, and parking areas.	$169,000.00
Installation, including foundations, erection of supporting structures, enclosures or weather protection, insulation and painting, utilities and connections, process integration, and process control equipment.	$482,000.00
Auxiliary buildings, including materials storage, employee facilities, and changes to existing structures.	$0.00
Ambient air monitoring network.	$0.00
Sub-Total:	$744,000.00

III. Indirect Costs - Non-Renewal	
Type of Cost	**Amount**
Final engineering design and supervision, and administrative overhead.	$364,000.00
Construction expense, including construction liaison, securing local building permits, insurance, temporary construction facilities, and construction clean-up.	$529,000.00
Contractor's fee and overhead.	$263,000.00
Sub-Total:	$1,156,000.00

IV. Calculations - Non-Renewal
For GHG permits: A single PSD fee (calculated on the capital cost of the project per 30 TAC § 116.163) will be required for all of the associated permitting actions for a GHG PSD project. Other NSR permit fees related to the project that have already been remitted to the TCEQ can be subtracted when determining the appropriate fee to submit with the GHG PSD application. Identify these other fees in the GHG PSD permit application.

In signing the "General" sheet with this fee worksheet attached, I certify that the total estimated capital cost of the project as defined in 30 TAC §116.141 is equal to or less than the above figure. I further state that I have read and understand Texas Water Code § 7.179, which defines Criminal Offenses for certain violations, including intentionally or knowingly making, or causing to be made, false material statements or representations.

Estimated Capital Cost		Major Application Fee
Less than $300,000		$3,000 (minimum fee)
$300,000 - $7,500,000		1.0% of capital cost
$300,000 - $25,000,000		N/A
Greater than $7,500,000		$75,000 (maximum fee)
Greater than $25,000,000		N/A

Your estimated capital cost:	**$1,900,000.00**	x 1.0% =
Permit Application Fee:		**$19,000.00**

VI. Total Fees

Note: fees can be paid together with one payment or as two separate payments.	
Non-Renewal Fee	$19,000.00
Total	$19,000.00

VII. Payment Information

A. Payment One (required)	
Was the fee paid online?	No
Enter the fee amount:	$ 19,000.00
Enter the check, money order, ePay Voucher, or other transaction number:	10722406
Enter the Company name as it appears on the check:	Chevron Phillips Chemical
C. Total Paid	**$19,000.00**

VIII. Professional Engineer Seal Requirement

Is the estimated capital cost of the project above $2 million?	No
Is the application required to be submitted under the seal of a Texas licensed P.E.? Note: an electronic PE seal is acceptable.	No

Pollutant	Does this pollutant require PSD review?	How will you demonstrate that this project meets all applicable requirements?	Notes	Additional Notes (optional)
Ozone	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.	
VOC	No	MERA steps 0-2 AND Modeling (screen or refined)	Attach both an "Electronic Modeling Evaluation Workbook" (EMEW) AND a detailed description of which MERA step was met. Include speciated emission rates with the total VOC and/or PM species corresponding to the short-term and long-term differences represented on the Unit Types-Emission Rates sheet.	
PM	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.	
PM10	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.	
PM2.5	No	Not applicable	This pollutant is not a part of this project or does not require an impacts analysis.	
NOx	No	Modeling: screen or refined	Attach a completed "Electronic Modeling Evaluation Workbook" (EMEW).	
CO	No	Modeling: screen or refined	Attach a completed "Electronic Modeling Evaluation Workbook" (EMEW).	
SO2	No	Modeling: screen or refined	Attach a completed "Electronic Modeling Evaluation Workbook" (EMEW).	

Plant Type	Current Tier I BACT	Confirm	Additional Notes

Action Requested	FINs	Unit Type	Pollutant	Current Tier I BACT	Confirm	Additional Notes
New/Modified	P-1792 (F)	Fugitives: Piping and Equipment Leak	VOC	Specify which is applicable: 1. Uncontrolled VOC emissions < 10 tpy: none 2. 10 tpy < uncontrolled VOC emissions < 25 tpy: 28M leak detection and repair program. 75% credit for 28M. 3. Uncontrolled VOC emissions > 25 tpy: 28VHP leak detection and repair program. 97% credit for valves, 85% for pumps and compressors. 4. VOC vp < 0.002 psia: no inspection required, no fugitive emissions expected. For emissions of approved odorous compounds (chlorine, ammonia, hydrogen sulfide, hydrogen cyanide and mercaptans only): AVO inspection twice per shift. Appropriate credit for AVO program.	Yes	see BACT and Nonattainment review sections.
			MSS	Same as normal operation BACT requirements.	Yes	see BACT and Nonattainment review sections.
New/Modified	P-1792	Control: Flare	VOC	VOC: Meets 40 CFR 60.18. Destruction Efficiency: 99% for certain compounds up to three carbons, 98% otherwise. No flaring of halogenated compounds is allowed. Flow monitor required. Composition or BTU analyzer may be required.	Yes	see BACT and Nonattainment review sections.
			NOx	Provide emission factor used and reference.	Yes	See emissions calculations section
			CO	Provide emission factor used and reference.	Yes	See emissions calculations section
			SO2	Provide emission factor used and reference.	Yes	See emissions calculations section
			MSS	Same as normal operation BACT requirements.	Yes	

Texas Commission on Environmental Quality
Form PI-1 General Application
Monitoring

FIN	Unit Type	Pollutant	Minimum Monitoring Requirements	Confirm	Additional Notes for Monitoring
P-1792 (F)	Fugitives: Piping and Equipment Leak	VOC	Use EPA Method 21 to monitor for leaks from seals on pumps, compressors, agitator and valve seals on piping components in light liquid and gas VOC service quarterly. Gas or hydraulic check new and a replaced connectors prior to returning to service, or monitor with Method 21 within 15 days of returning to service. Leak detection and repair (LDAR) Program 28M has a leak definition where repair action is required at 10,000 ppmv. LDAR Program 28 VHP has a leak definition where repair action is required at 500 ppmv for valves and connectors and 2000 ppmv for pumps, compressors and agitators. Check connectors weekly using audio, visual or olfactory (AVO) senses to observe leaks. Record results and corrective action taken.	Yes	Also 28CNTQ for connector monitoring
P-1792	Control: Flare	VOC	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	
		NOx	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	
		CO	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	
		SO2	Pilot flame presence monitored continuously. Waste gas flow and composition monitored continuously (measured at the instrument's capability or every 15 minutes, which ever is less), with hourly averages recorded. A Btu analyzer may be substituted for the composition analyzer where the composition is understood.	Yes	

Texas Commission on Environmental Quality
Form PI-1 General Application
Materials

Item	How submitted	Date submitted
A. Administrative Information		
Form PI-1 General Application	STEERS	05/04/2020
Hard copy of the General sheet with original (ink) signature	Mail	05/04/2020
Professional Engineer Seal	STEERS	05/04/2020
B. General Information		
Copy of current permit (both Special Conditions and MAERT)		
Core Data Form		
Area map	STEERS	05/04/2020
Plot plan	STEERS	05/04/2020
Process description	STEERS	05/04/2020
Process flow diagram	STEERS	05/04/2020
List of MSS activities	STEERS	05/04/2020
State regulatory requirements discussion	STEERS	05/04/2020
C. Federal Applicability		
Summary and project emission increase determination - Tables 1F and 2F	STEERS	05/04/2020
Netting analysis (if required) - Tables 3F and 4F as needed	Not applicable	
D. Technical Information		
BACT discussion, if additional details are attached	STEERS	05/04/2020
Monitoring information, if additional details are attached	STEERS	05/04/2020
Material Balance (if applicable)		
Calculations	STEERS	05/04/2020
E. Impacts Analysis		
Qualitative impacts analysis		
MERA analysis	STEERS	05/04/2020
Electronic Modeling Evaluation Workbook: SCREEN3	STEERS	05/04/2020
Electronic Modeling Evaluation Workbook: NonSCREEN3	Not applicable	
PSD modeling protocol		
F. Additional Attachments		

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APPENDIX B – ELECTRONIC MODELING EVALUATION WORKBOOK (EMEW)

AREA MAP

29°49'30" N, 94°55'48" W WGS84 1994 Mont Belvieu, TX

WGS84 Zone 15R

CHEVRON PHILLIPS CHEMICAL COMPANY, LP
CEDAR BAYOU PLANT

3000 FEET

PROPERTY LINE

3000 FEET

Map created with TOPO! ©2008 National Geographic

NATIONAL GEOGRAPHIC

0.0 0.5 1.0 miles
0.0 0.5 1.0 1.5 km

TEXAS

WAID ENVIROMENTAL

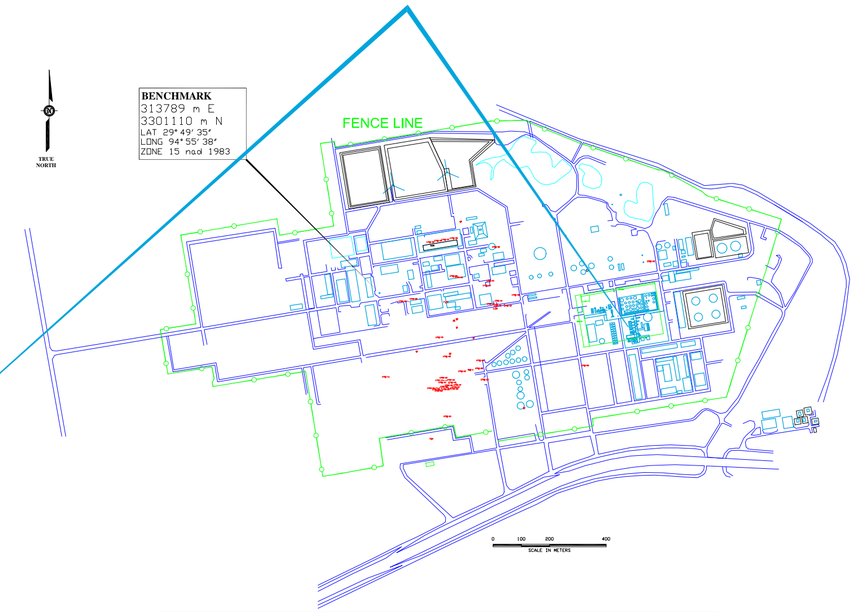
CHP7634\AREAMAP.DWG

TN MN 2°

10/10/19

PLOT PLAN

THIS IS THE AREA THAT IS ENLARGED



Emission Point Number	Name	Location Easting, Northing (meters)
03	Spent Solvent Tank	314300, 3300700
1592-42	Holding Pond	314748, 3301219
1792-11	Solvent Storage Tank	313810, 3300810
1792-15	F-394 Baghouse	314020, 3300800
1792-16	F-395 Baghouse	314025, 3300800
1792-17	F-396 Baghouse	314015, 3300800
1792-18	F-397 Baghouse	314160, 3300800
1792-21	F-312 Bagfilter	314028, 3300670
1792-22	F-315 Bagfilter	314026, 3300882
1792-23	F-320 Baghouse	314515, 3300850
1792-35	Line 1 Pellet Dryer	313990, 3301393
1792-36	Line 2 Pellet Dryer	314037, 3301301
1792-37	Line 3 Pellet Dryer	314031, 3301320
1792-38	Line 4 Pellet Dryer	314057, 3301322
1792-39	Line 5 Pellet Dryer	313878, 3301270
1792-40	Line 6 Pellet Dryer	313837, 3301263
1792-42	Diesel Fuel Tank	314167, 3301133
1792-43	P-930 Stormwater Pump Engine	314205, 3301070
1792-44	Diesel Fuel Tank	314205, 3301070
1792-45	Stormwater Holding Tank	314270, 3301100
1792-46	API Separator	314200, 3301070
1792-47	API Skim Tank	314230, 3301070
1792-48	Stormwater Holding Pond	314200, 3301270
1792-4C	F-376 Baghouse	314080, 3300830
1792-4F	F-365 Baghouse	314060, 3300790
1792-4G	F-366 Baghouse	314045, 3300790
1792-4H	F-367 Baghouse	314035, 3300790
1792-4J	F-356 Baghouse	314010, 3300790
1792-50	Demethanizer Drum	314050, 3301167
1792-51	Depropanizer Drum	314056, 3301168
1792-76	Cooling Tower	314000, 3300950
26	H-602 Hot Oil Heater	313920, 3300900
28	Solvent Rundown Tank	314062, 3301015
29	Solvent Holding Tank	314053, 3301015
30	Methanol Tank	314121, 3300948
31	Chilled Water Methanol	314062, 3300985
45	X-901 Flare Normal Operation	314075, 3301360
F-75	Process Fugitives	314023, 3301075
F04	Pellet Losses	313972, 3300591
LL03	Slop Oil Loading	314200, 3301060
RDX-1	Catalytic Oxidizer	314096, 3300830

WAID ENVIRONMENTAL

CHEVRON PHILLIPS CHEMICAL COMPANY, LP

PEU - 1792

Drawn By	Start Date	Rev. Date	DWG Name	Rev. No.
DWW	11/1/10	3/11/15	PLOT	7

H:\CLIENTS\CHEVRON PHILLIPS CHEM CO\CHP10491\ACAD

PROCESS FLOW DIAGRAM

The process flow diagram is provided in the confidential attachments.

PROCESS DESCRIPTION

Project Description

This amendment authorizes changes to flare process monitoring and controls to optimize the addition of steam/air and supplemental natural gas which will support continued maintenance of the required net heating value in the combustion zone. This application is one component of a project that addresses these changes for a total of seven flares within the next several years that are authorized by multiple TCEQ NSR permits. Each permit will have its own application addressing the flares in that permit, and this application addresses the amendment for Permit No. 2462C for Flare X-901. Changes are proposed to add monitoring equipment with associated equipment leak fugitives and to allow for the increase in supplemental fuel gas that may be combusted with the increase in total heating value.

General Process Description

Polyethylene Unit (PEU-1792) is a low-density polyethylene production unit. The general manufacturing process for the units associated with this application is as follows. Raw ethylene enters a reactor to form crude polyethylene product. The crude product is sent to storage where it may be blended, pelletized, and/or shipped off site. CPChem considers the process description for the sources associated with this application to be proprietary. Therefore, a more detailed process description and process flow diagram are included in the confidential section of this application.

EMISSIONS CALCULATIONS

Detailed emissions data and calculations are included in the confidential section of this application. The Table 1(a) information is included in the Air Permit Application Workbook. A summary of emissions changes is included in this section.

DETAILED EMISSION SUMMARY

EPN	FIN	Description	VOC						NO_x					
			Previous Authorization		Proposed Authorization		Increase/Decrease		Previous Authorization		Proposed Authorization		Increase/Decrease	
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
F-75	P-1792	Process Fugitives	13.42	58.78	13.50	59.12	0.08	0.34						
45	P-1792	X-901 Flare Operation	87.30	9.27	87.43	9.79	0.13	0.52	14.09	2.76	15.69	9.33	1.60	6.57
		TOTAL RATES:				**68.91**		**0.86**				**9.33**		**6.57**

DETAILED EMISSION SUMMARY

EPN	FIN	Description	CO						SO_2					
			Previous Authorization		Proposed Authorization		Increase/Decrease		Previous Authorization		Proposed Authorization		Increase/Decrease	
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
F-75	P-1792	Process Fugitives												
45	P-1792	X-901 Flare Operation	72.45	19.92	80.59	53.41	8.14	33.49	0.04	0.03	0.18	0.61	0.14	0.58
		TOTAL RATES:				**53.41**		**33.49**				**0.61**		**0.58**

MAINTENANCE, STARTUP, AND SHUTDOWN ACTIVITIES

MSS Emissions are already authorized under this permit. No changes in MSS emissions are proposed as part of this application.

STATE REGULATORY REQUIREMENTS

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
Chapter 101	**General Rules**		
§101.2	Multiple Air Contaminant Sources or Properties	☐ Yes ☒ No	CPChem is not petitioning the commission to designate two or more properties as a single property
§101.3.	Circumvention	☒ Yes ☐ No	CPChem will not use a plan, activity, device or contrivance to conceal or appear to minimize an emission violation of the Act or a regulation.
§101.4	Nuisance	☒ Yes ☐ No	The facility will not discharge air contaminants in such concentration/duration to be injurious or adversely affect human health or welfare, or interfere with the normal use/enjoyment of animal life, vegetation, or property.
§101.5	Traffic Hazard	☒ Yes ☐ No	The facility will not discharge air contaminants, uncombined water, or other materials from any source that causes or has a tendency to cause a traffic hazard or interfere with normal road use.
§101.8 and §101.9	Sampling and Sampling Ports	☒ Yes ☐ No	CPChem will comply with the applicable requirements if requested by the board or Executive Director to conduct sampling.
§101.10.	Emissions Inventory Requirements	☒ Yes ☐ No	CPChem annually submits an emission inventory by the required due date.
§101.14.	Sampling Procedures and Terminology	☒ Yes ☐ No	CPChem will employ commonly accepted methods and procedures for sampling/measuring air contaminants when otherwise not specified in rules, regulations, determinations and/or orders by the commission.
§101.20.	Compliance with Environmental Protection Agency Standards	☒ Yes ☐ No	The sources in this application will be operated to comply with the applicable Environmental Protection Agency Standards as detailed in this supporting documentation.
§101.21.	The National Primary and Secondary Ambient Air Quality Standards	☒ Yes ☐ No	The sources in this application will be operated in accordance with the National Primary and Secondary Air Quality Standards. Air dispersion modeling will be submitted at the request of the commission.
§101.23.	Alternate Emission Reduction (“Bubble”) Policy	☐ Yes ☒ No	CPChem does not seek approval of emission controls from another facility at this site in lieu of controlling the sources as explained in this application.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§101.24.	Inspection Fees	☒ Yes ☐ No	CPChem submits the relevant inspection or emissions fees annually to the commission by the specified due date.
§101.26.	Surcharge on Fuel Oil in Specified Boilers	☐ Yes ☒ No	There is not an affected boiler in this application.
§101.27.	Emissions Fees	☒ Yes ☐ No	CPChem submits the relevant inspection or emissions fees annually to the commission by the specified due date.
§101.28.	Stringency Determination for Federal Operating Permits	☐ Yes ☒ No	CPChem will comply with the relevant state regulatory requirements as defined by §122.10 rather than equivalent or more stringent requirements
§101.201.	Emissions Event Reporting and Recordkeeping Requirements	☒ Yes ☐ No	CPChem will comply with the emissions events reporting and recordkeeping requirements.
§101.211.	Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements	☒ Yes ☐ No	CPChem will comply with the reporting and recordkeeping requirements for scheduled maintenance, startup, and shutdown activities.
§101.221 through §101.224.	Operational Requirements, Demonstrations, and Actions to Reduce Excessive Emissions	☒ Yes ☐ No	CPChem will comply with the applicable requirements of §101.221 through §101.224.
§101.231 through §101.233.	Variances	☐ Yes ☒ No	CPChem is not seeking a variance.
§101.300 through §101.311.	Emission Credit Banking and Trading	☒ Yes ☐ No	CPChem participates in the emission credit banking and trading and complies with the relevant registry and recordkeeping requirements.
§101.330 through §101.339.	Emission Banking and Trading of Allowances	☐ Yes ☒ No	The site does not include an electric generating unit permitted under Chapter 116, Subchapter I.
§101.350 through §101.363.	Mass Emissions Cap and Trade Program	☒ Yes ☐ No	CPChem complies with the relevant provisions, allowance allocation, monitoring, compliance demonstration, reporting, and level of activity certification requirements.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§101.370 through §101.379.	Discrete Emission Credit Banking and Trading	☒ Yes ☐ No	CPChem complies with the relevant provisions in this voluntary reduction program.
§101.390 through §101.403.	Highly Reactive Volatile Organic Compound Emission Cap and Trade Program	☒ Yes ☐ No	CPChem has highly-reactive VOC emissions in excess of 10 tons/yr and participates in this program.
Chapter 111.	**Visible Emissions**		
§111.111 through §111.113.	Visible Emissions	☒ Yes ☐ No	The flares will be observed daily by operations personnel and recorded on the appropriate form.
§111.121 through §111.129.	Incineration	☐ Yes ☒ No	There is not an incinerator associated with this application that burns domestic, commercial, or industrial solid waste as defined in §101.1, medical waste, or hazardous waste as fuel for energy recovery.
§111.131 through §111.139.	Abrasive Blasting of Water Storage Tanks Performed by Portable Operations	☐ Yes ☒ No	Abrasive blasting of water storage tanks performed by portable operations will not be performed at the facility as part of this application.
§111.141 through §111.149.	Materials Handling, Construction, Roads, Streets, Alleys, and Parking Lots	☐ Yes ☒ No	The site is located in Harris County which is not listed as an affected area.
§111.151.	Allowable Emissions Limits	☐Yes ☒ No	There are no permit allowable emissions of particulate matter associated with this application.
§111.153.	Emissions Limits on Steam Generators	☐ Yes ☒ No	There are no steam generators with heat input greater than 2500 MM Btu/hr or any solid fossil fuel-fired steam generators associated with this application.
§111.171 through §111.175.	Emissions Limits on Agricultural Processes	☐ Yes ☒ No	There are no agricultural processes associated with this application.
§111.181 through §111.183.	Exemptions for Portable or Transient Operations	☐ Yes ☒ No	There are no portable or transient operations such as rock crushers, hot mix asphaltic concrete facilities, etc., associated with this application.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§111.201 through §111.221.	Outdoor Burning	☒ Yes ☐ No	CPChem will conduct outdoor burning only as authorized by §111.201-§111.221, and will comply with the General Requirements for Allowable Outdoor Burning in §111.219 for any outdoor burning conducted, such as for fire training or barbecues.
Chapter 112.	**Sulfur Compounds**		
§112.3 through §112.4.	Net Ground Level Concentrations	☒ Yes ☐ No	The sources associated with this application are not expected to cause or contribute to a condition that exceeds the applicable net ground level concentration limit.
§112.5 and §112.6.	Allowable Emission Rates - Sulfuric Acid Plants	☐ Yes ☒ No	There is not an affected sulfuric acid plant associated with this application
§112.7.	Allowable Emission Rates - Sulfur Recovery Plant	☐ Yes ☒ No	There is not an affected sulfur recovery plant associated with this application.
§112.8.	Allowable Emission Rates from Solid Fossil Fuel-Fired Steam Generators	☐ Yes ☒ No	There is not a solid fossil fuel-fired steam generator associated with this application.
§112.9.	Allowable Emission Rates - Combustion of Liquid Fuel	☐ Yes ☒ No	There is no combustion of liquid fuel at the facility.
§112.14.	Allowable Emission Rates from Nonferrous Smelter Processes	☐ Yes ☒ No	There is not an affected nonferrous smelter process associated with this application.
§112.15 through §112.18.	Temporary Fuel Shortage Plan	☐ Yes ☒ No	CPChem does not have units potentially subject to the temporary fuel shortage plan requirements.
§112.19 through §112.21.	Area Control Plan	☐ Yes ☒ No	CPChem does not intend to apply for an Area Control Plan at this time.
§112.31 through §112.34.	Control of Hydrogen Sulfide	☐ Yes ☒ No	There are not emissions of H2S associated with this application.
§112.41 through §112.47.	Control of Sulfuric Acid	☐ Yes ☒ No	The sources associated with this application are not expected to emit sulfuric acid.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§112.51 through §112.59.	Control of Total Reduced Sulfur	☐ Yes ☒ No	The facilities are not associated with a kraft pulp mill.
Chapter 113.	**Toxic Materials**		
§113.55.	Radon Emissions from Phosphogypsum Stacks	☐ Yes ☒ No	The sources in this application do not emit radon emissions from the production, sale, distribution, or usage of phosphogypsum.
§113.100	General Provisions (40 CFR 63, Subpart A)	☒ Yes ☐ No	Sources are subject to Subpart A and will comply with the applicable requirements..
§113.110.	Synthetic Organic Chemical Manufacturing Industry (40 CFR 63, Subpart F)	☐ Yes ☒ No	Sources in this application are not subject to regulation under Subpart F.
§113.120.	Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations and Wastewater (40 CFR 63, Subpart G)	☐ Yes ☒ No	Sources in this application are not subject to regulation under Subpart G.
§113.130.	Organic Hazardous Air Pollutants for Equipment Leaks (40 CFR 63, Subpart H)	☐ Yes ☒ No	Sources in this application are not subject to regulation under Subpart H.
§113.140.	Certain Processes Subject to the Negotiated Chapter for Equipment Leaks (40 CFR 63, Subpart I)	☐ Yes ☒ No	The sources associated with this application are not subject to the requirements in 40 CFR 63, Subpart I.
§113.170.	Coke Oven Batteries (40 CFR 63, Subpart L)	☐ Yes ☒ No	The sources associated with this application are not part of a coke plant with an existing coke oven battery.
§113.180.	Perchloroethylene Dry Cleaning Facilities (40 CFR 63, Subpart M)	☐ Yes ☒ No	There is not a perchloroethylene dry cleaning process associated with this application.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.190.	Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (40 CFR 63, Subpart N)	☐ Yes ☒ No	There is not an affected chromium electroplating process associated with this application.
§113.200.	Ethylene Oxide Sterilization Facilities (40 CFR 63, Subpart O)	☐ Yes ☒ No	There is not an affected ethylene oxide sterilization process associated with this application.
§113.220.	Industrial Process Cooling Towers (40 CFR 63, Subpart Q)	☐ Yes ☒ No	This application does not contain a cooling tower.
§113.230.	Gasoline Distribution Facilities (40 CFR 63, Subpart R)	☐ Yes ☒ No	There is not an affected bulk gasoline terminal or gasoline pipeline breakout station associated with this application.
§113.240.	Pulp and Paper Production (40 CFR 63, Subpart S)	☐ Yes ☒ No	There is not an affected pulp and paper production process associated with this application.
§113.250.	Halogenated Solvent Cleaning (40 CFR 63, Subpart T)	☐ Yes ☒ No	There is no halogenated solvent cleaning associated with this application.
§113.260.	Group I Polymers and Resins (40 CFR 63, Subpart U)	☐ Yes ☒ No	There is not an affected Group I polymers or resins production unit associated with this application.
§113.280.	Epoxy Resins Production and Non-Nylon Polyamides Production (40 CFR 63, Subpart W)	☐ Yes ☒ No	There is not an affected epoxy resins production or non-nylon polyamides production unit associated with this application.
§113.290.	Secondary Lead Smelting (40 CFR 63, Subpart X)	☐ Yes ☒ No	There is no secondary lead smelting associated with this application.
§113.300.	Marine Vessel Loading (40 CFR 63, Subpart Y)	☐ Yes ☒ No	There is no marine vessel loading operation associated with this application.
§113.320.	Phosphoric Acid Manufacturing Plants (40 CFR 63, Subpart AA)	☐ Yes ☒ No	There is not an affected phosphoric acid manufacturing plant associated with this application.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.330.	Phosphate Fertilizers Production Plants (40 CFR 63, Subpart BB)	☐ Yes ☒ No	There is not an affected phosphate fertilizer production plant associated with this application.
§113.340.	Petroleum Refineries (40 CFR 63, Subpart CC)	☐ Yes ☒ No	There is not an affected petroleum refinery associated with this application.
§113.350.	Off-site Waste Recovery Operations (40 CFR 63, Subpart DD)	☐ Yes ☒ No	There is not an affected off-site waste recovery operation associated with this application.
§113.360.	Magnetic Tape Manufacturing Operations (40 CFR 63, Subpart EE)	☐ Yes ☒ No	There are no affected magnetic tape manufacturing operations associated with this site application.
§113.380.	Aerospace Manufacturing and Rework Facilities (40 CFR 63, Subpart GG)	☐ Yes ☒ No	There is not an affected aerospace manufacturing and/or rework process unit associated with this application.
§113.390.	Oil and Natural Gas Production Facilities (40 CFR 63, Subpart HH)	☐ Yes ☒ No	There is not an affected oil and gas production unit associated with this application.
§113.400.	Shipbuilding and Ship Repair (Surface Coating) (40 CFR 63, Subpart II)	☐ Yes ☒ No	There is not an affected shipbuilding and ship repair operation associated with this application.
§113.410.	Wood Furniture Manufacturing Operations (40 CFR 63, Subpart II)	☐ Yes ☒ No	There is not an affected wood furniture manufacturing operation associated with this application.
§113.420.	Printing and Publishing (40 CFR 63, Subpart KK)	☐ Yes ☒ No	There is not an affected printing and publishing operation associated with this application.
§113.430.	Primary Aluminum Reduction Plants (40 CFR 63, Subpart LL)	☐ Yes ☒ No	There is not an affected primary aluminum reduction plant associated with this application.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.440.	Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand Alone Semichemical Pulp Mills (40 CFR 63, Subpart MM)	☐ Yes ☒ No	This application does not include a chemical recovery combustion source at a kraft, soda, sulfite, or standalone semichemical pulp mill.
§113.460.	Tanks - Level 1 (40 CFR 63, Subpart OO)	☐ Yes ☒ No	This application does not include a tank for which another subpart in 40 CFR 60, 61, or 63 applies or references Subpart OO.
§113.470.	Containers (40 CFR 63, Subpart PP)	☐ Yes ☒ No	This application does not include a container for which another subpart in 40 CFR 60, 61, or 63 applies or references Subpart PP.
§113.480.	Surface Impoundments (40 CFR 63, Subpart QQ)	☐ Yes ☒ No	This application does not include a surface impoundment for which another subpart in 40 CFR 60, 61, or 63 applies or references Subpart QQ.
§113.490.	Individual Drain Systems (40 CFR 63, Subpart RR)	☐ Yes ☒ No	This application does not include an individual drain system for which another subpart in 40 CFR 60, 61, or 63 applies or references Subpart RR.
§113.500.	Closed Vent Systems, Control Devices, Recovery Devices, and Routing to Fuel Gas System or Process (40 CFR 63, Subpart SS)	☒ Yes ☐ No	This application includes a closed vent system, control device, recovery device, or fuel gas system for which another subpart in 40 CFR 60, 61, or 63 applies to or references Subpart SS.
§113.510.	Equipment Leaks-Control Level 1 (40 CFR 63, Subpart TT)	☐ Yes ☒ No	This application does not include process fugitive equipment for which another subpart in 40 CFR 60, 61, or 63 applies or references Subpart TT.
§113.520.	Equipment Leaks-Control Level 2 (40 CFR 63, Subpart UU)	☒ Yes ☐ No	This application includes process fugitive equipment for which another subpart in 40 CFR 60, 61, or 63 applies or references Subpart UU.
§113.530.	Oil-Water Separators and Organic-Water Separators (40 CFR 63, Subpart VV)	☐ Yes ☒ No	This application does not contain an oil-water or organic-water separator for which another subpart in 40 CFR 60, 61, or 63 applies or references Subpart VV.
§113.540.	Storage Vessels-(Tanks) Control Level 2 (40 CFR 63, Subpart WW)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.550.	Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations (40 CFR 63, Subpart XX)	☐ Yes ☒ No	There is not an affected ethylene manufacturing unit associated with this application.
§113.560.	Generic Maximum Achievable Control Technology Standards (40 CFR 63, Subpart YY)	☐ Yes ☒ No	There is not an affected ethylene manufacturing unit associated with this application.
§113.600.	Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants (40 CFR 63, Subpart CCC)	☐ Yes ☒ No	There is not an affected HCl process or HCl regeneration process associated with this application.
§113.610.	Mineral Wool Production (40 CFR 63, Subpart DDD)	☐ Yes ☒ No	There is not an affected mineral wool production process associated with this application.
§113.620.	Hazardous Waste Combustors (40 CFR 63, Subpart EEE)	☐ Yes ☒ No	There is not an affected hazardous waste combustor associated with this application.
§113.640.	Pharmaceuticals Production (40 CFR 63, Subpart GGG)	☐ Yes ☒ No	There is not an affected pharmaceutical manufacturing operation associated with this application.
§113.650.	Natural Gas Transmission and Storage Facilities (40 CFR 63, Subpart HHH)	☐ Yes ☒ No	There is not an affected natural gas transmission and storage process unit associated with this application.
§113.660.	Flexible Polyurethane Foam Production (40 CFR 63, Subpart III)	☐ Yes ☒ No	There is not an affected flexible polyurethane foam or rebound foam process associated with this application.
§113.670.	Group IV Polymers and Resins (40 CFR 63, Subpart JJJ)	☐ Yes ☒ No	There is not an affected Group IV polymers or resins production unit associated with this application.
§113.690.	Portland Cement Manufacturing (40 CFR 63, Subpart LLL)	☐ Yes ☒ No	There is not an affected portland cement manufacturing process associated with this application.
§113.700.	Pesticide Active Ingredient Production (40 CFR 63, Subpart MMM)	☐ Yes ☒ No	There is not an affected pesticide active ingredient production unit associated with this application.
§113.710.	Wool Fiberglass Manufacturing (40 CFR 63, Subpart NNN)	☐ Yes ☒ No	There is not an affected wool fiberglass manufacturing process associated with this application.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.720.	Manufacture of Amino/Phenolic Resins (40 CFR 63, Subpart OOO)	☐ Yes ☒ No	There is not an affected amino/phenolic resin manufacturing process associated with this application.
§113.730.	Polyether Polyols Production (40 CFR 63, Subpart PPP)	☐ Yes ☒ No	There is not an affected polyether polyols production unit associated with this application.
§113.740.	Primary Copper Smelting (40 CFR 63, Subpart QQQ)	☐ Yes ☒ No	The facility is not part of a copper smelting production facility.
§113.750.	Secondary Aluminum Production (40 CFR 63, Subpart RRR)	☐ Yes ☒ No	The facility is not part of a secondary aluminum production facility.
§113.770.	Primary Lead Smelting (40 CFR 63, Subpart TTT)	☐ Yes ☒ No	There is not an affected primary lead smelting process associated with this application.
§113.780.	Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units (40 CFR 63, Subpart UUU)	☐ Yes ☒ No	There is not an affected petroleum refinery associated with this application.
§113.790.	Publicly Owned Treatment Works (40 CFR 63, Subpart VVV)	☐ Yes ☒ No	There is not an affected publicly owned treatment works waste treatment facility associated with this application.
§113.810.	Ferroalloys Production: Ferromanganese and Silicomanganese (40 CFR 63, Subpart XXX)	☐ Yes ☒ No	There is not an affected ferromanganese or silicomanganese production unit associated with this application.
§113.840.	Municipal Solid Waste Landfills (40 CFR 63, Subpart AAAA)	☐ Yes ☒ No	There is not an affected municipal solid waste landfill associated with this application.
§113.860.	Manufacturing of Nutritional Yeast (40 CFR 63, Subpart CCCC)	☐ Yes ☒ No	There is not an affected nutritional yeast manufacturing operation associated with this application.
§113.870	Plywood an Composite Wood Products (40 CFR 63, Subpart DDDD)	☐ Yes ☒ No	The site does not include an affected plywood or composite wood.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.880.	Organic Liquids Distribution (Non-Gasoline) (40 CFR 63, Subpart EEEE)	☐ Yes ☒ No	The sources associated with this application do not include any affected organic liquid distribution (non-gasoline) operations.
§113.890.	Miscellaneous Organic Chemical Manufacturing (40 CFR 63, Subpart FFFF)	☒ Yes ☐ No	There is a facility subject to the MON associated with this application.
§113.900.	Solvent Extraction for Vegetable Oil Production (40 CFR 63, Subpart GGGG)	☐ Yes ☒ No	There is not an affected solvent extraction operation for vegetable oil production associated with this application.
§113.910.	Wet-Formed Fiberglass Mat Production (40 CFR 63, Subpart HHHH)	☐ Yes ☒ No	There is not an affected wet-formed fiberglass mat production unit associated with this application.
§113.920.	Surface Coating of Automobiles and Light-Duty Trucks (40 CFR 63, Subpart IIII)	☐ Yes ☒ No	Surface coating of automobiles and light-duty trucks is not performed at the site.
§113.930.	Paper and Other Web Coating (40 CFR 63, Subpart JJJJ)	☐ Yes ☒ No	There is not an affected paper or other web substrate coating operation associated with this application.
§113.940.	Surface Coating of Metal Cans (40 CFR 63, Subpart KKKK)	☐ Yes ☒ No	Surface coating of metal cans is not performed at the site.
§113.960.	Surface Coating of Miscellaneous Metal Parts and Products (40 CFR 63, Subpart MMMM)	☐ Yes ☒ No	The site is not a regulated entity for this subpart.
§113.970.	Surface Coating of Large Appliances (40 CFR 63, Subpart NNNN)	☐ Yes ☒ No	There is not an affected large appliances surface coating operation associated with this application.
§113.980.	Printing, Coating, and Dyeing of Fabrics and Other Textiles (40 CFR 63, Subpart OOOO)	☐ Yes ☒ No	There is not an affected fabric or other textile printing coating or dyeing process associated with this application.
§113.990.	Surface Coating of Plastic Parts and Products (40 CFR 63, Subpart PPPP)	☐ Yes ☒ No	There is not an affected surface coating operation associated with this application.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.1000.	Surface Coating of Wood Building Products (40 CFR 63, Subpart QQQQ)	☐ Yes ☒ No	There is not an affected coating operation associated with this application.
§113.1010.	Surface Coating of Metal Furniture (40 CFR 63, Subpart RRRR)	☐ Yes ☒ No	There is not an affected coating operation associated with this application.
§113.1020.	Surface Coating of Metal Coil (40 CFR 63, Subpart SSSS)	☐ Yes ☒ No	There is not an affected metal coil surface coating operation associated with this application.
§113.1030.	Leather Finishing Operations (40 CFR 63, Subpart TTTT)	☐ Yes ☒ No	There is not an affected leather finishing operation associated with this application.
§113.1040.	Cellulose Products Manufacturing (40 CFR 63, Subpart UUUU)	☐ Yes ☒ No	There is not an affected cellulose products manufacturing operation associated with this application.
§113.1050.	Boat Manufacturing (40 CFR 63, Subpart VVVV)	☐ Yes ☒ No	There is not an affected boat manufacturing operation associated with this application.
§113.1060.	Reinforced Plastic Composites Production (40 CFR 63, Subpart WWWW)	☐ Yes ☒ No	Reinforcing plastic composites production is not performed at this site.
§113.1070.	Rubber Tire Manufacturing (40 CFR 63, Subpart XXXX)	☐ Yes ☒ No	There is not an affected rubber tire manufacturing operation associated with this application.
§113.1080.	Stationary Combustion Turbines (40 CFR 63, Subpart YYYY)	☐ Yes ☒ No	There is not an affected stationary combustion turbine.
§113.1090.	Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1100.	Lime Manufacturing Plants (40 CFR 63, Subpart AAAAA	☐ Yes ☒ No	There is not an affected lime manufacturing plant associated with this application.
§113.1110.	Semiconductor Manufacturing (40 CFR 63, Subpart BBBBB)	☐ Yes ☒ No	There is not an affected semiconductor manufacturing process operation associated with this application.
§113.1120.	Coke Ovens: Pushing, Quenching, and Battery Stacks (40 CFR 63, Subpart CCCCC)	☐ Yes ☒ No	There is not an affected coke oven operation associated with this application.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.1130.	Boilers and Process Heaters (40 CFR 63, Subpart DDDDD)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1140.	Iron and Steel Foundries (40 CFR 63, Subpart EEEEE)	☐ Yes ☒ No	There is not an iron and steel foundry operated at this site.
§113.1150.	Integrated Iron and Steel Manufacturing Facilities (40 CFR 63, Subpart FFFFF)	☐ Yes ☒ No	There is not an iron and steel manufacturing facility operating at this site.
§113.1160.	Site Remediation (40 CFR 63, Subpart GGGGG)	☐ Yes ☒ No	There are no site remediation activities authorized under this application.
§113.1170.	Miscellaneous Coating Manufacturing (40 CFR 63, Subpart HHHHH)	☐ Yes ☒ No	Miscellaneous coating manufacturing is not performed at this site.
§113.1180.	Mercury Emissions from Mercury Cell Chlor-Alkali Plants (40 CFR 63, Subpart IIIII)	☐ Yes ☒ No	There is not an affected mercury cell chlor-alkali process operation associated with this application.
§113.1190.	Brick and Structural Clay Products Manufacturing (40 CFR 63, Subpart JJJJJ)	☐ Yes ☒ No	Brick and structural clay products manufacturing are not performed at this site.
§113.1200.	Clay Ceramics Manufacturing (40 CFR 63, Subpart KKKKK)	☐ Yes ☒ No	Clay ceramics manufacturing is not performed at this site.
§113.1210.	Asphalt Processing and Asphalt Roofing Manufacturing (40 CFR 63, Subpart LLLLL)	☐ Yes ☒ No	Asphalt processing or asphalt roofing manufacturing is not performed at this site.
§113.1220.	Flexible Polyurethane Foam Fabrication Operations (40 CFR 63, Subpart MMMMM)	☐ Yes ☒ No	Flexible polyurethane foam fabrication is not performed at this site.
§113.1230.	Hydrochloric Acid Production (40 CFR 63, Subpart NNNNN)	☐ Yes ☒ No	Hydrochloric acid production is not performed at this site.
§113.1250.	Engine Test Cells/Stands (40 CFR 63, Subpart PPPPP)	☐ Yes ☒ No	There is not an affected engine test cell associated with this application.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.1260.	Friction Materials Manufacturing Facilities (40 CFR 63, Subpart QQQQQ)	☐ Yes ☒ No	There is not an affected friction materials manufacturing facility associated with this application.
§113.1270.	Taconite Iron Ore Processing (40 CFR 63, Subpart RRRRR)	☐ Yes ☒ No	There is not an affected taconite iron ore processing facility associated with this application.
§113.1280.	Refractory Products Manufacturing (40 CFR 63, Subpart SSSSS)	☐ Yes ☒ No	There is not an affected refractory products manufacturing facility associated with this application.
§113.1290.	Primary Magnesium Refining (40 CFR 63, Subpart TTTTT)	☐ Yes ☒ No	There is not an affected primary magnesium refining facility associated with this application.
§113.1300.	Coal and Oil Fired Electric Utility Steam Generating Units (40 CFR 63, Subpart UUUUU)	☐ Yes ☒ No	There is not an affected coal and oil fired electric utility steam generating unit associated with this application.
§113.1320.	Hospital Ethylene Oxide Sterilizers Area Sources (40 CFR 63, Subpart WWWWW)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1340.	Electric Arc Furnace Steelmaking Facilities Area Sources (40 CFR 63, Subpart YYYYY)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1350.	Iron and Steel Foundries Area Sources (40 CFR 63, Subpart ZZZZZ)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1370.	Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities Area Sources (40 CFR 63, Subpart BBBBBB)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1380.	Gasoline Dispensing Facilities Area Sources (40 CFR 63, Subpart CCCCCC)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.1390.	Polyvinyl Chloride and Copolymers Production Area Sources (40 CFR 63, Subpart DDDDDD)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1400.	Primary Copper Smelting Area Sources (40 CFR 63, Subpart EEEEEE)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1410.	Secondary Copper Smelting Area Sources (40 CFR 63, Subpart FFFFFF)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1420.	Primary Nonferrous Metals Area Sources - Zinc, Cadmium, and Beryllium (40 CFR 63, Subpart GGGGGG)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1425.	Paint Stripping and Miscellaneous Surface Coating at Area Sources (40 CFR 63, Subpart HHHHHH)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1435.	Industrial, Commercial, and Institutional Boilers Area Sources (40 CFR 63, Subpart JJJJJJ)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1445.	Acrylic and Modacrylic Fibers Area Sources (40 CFR 63, Subpart LLLLLL)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1450.	Carbon Black Production Area Sources (40 CFR 63, Subpart MMMMMM)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1455.	Chemical Manufacturing Area Sources: Chromium Compounds (40 CFR 63, Subpart NNNNNN)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.1460.	Flexible Polyurethane Foam Production and Fabrication Area Sources (40 CFR 63, Subpart OOOOOO)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1465.	Lead Acid Battery Manufacturing Area Sources (40 CFR 63, Subpart PPPPPP)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1470.	Wood Preserving Area Sources (40 CFR 63, Subpart QQQQQQ)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1475.	Clay Ceramics Manufacturing Area Sources (40 CFR 63, Subpart RRRRRR)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1480.	Glass Manufacturing Area Sources (40 CFR 63, Subpart SSSSSS)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1485.	Secondary Nonferrous Metals Processing Area Sources (40 CFR 63, Subpart TTTTTT)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1495.	Chemical Manufacturing Area Sources (40 CFR 63, Subpart VVVVVV)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1500.	Plating and Polishing Area Sources (40 CFR 63, Subpart WWWWWW)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1505.	Metal Fabrication and Finishing Area Sources (40 CFR 63, Subpart XXXXXX)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1510.	Ferroalloys Production Area Sources (40 CFR 63, Subpart YYYYYY)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.1515.	Aluminum, Copper, and other Nonferrous Foundries Area Sources (40 CFR 63, Subpart ZZZZZZ)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1520.	Asphalt Processing and Asphalt Roofing Manufacturing Area Sources (40 CFR 63, Subpart AAAAAAA)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1525.	Chemical Preparations Industry Area Sources (40 CFR 63, Subpart BBBBBBB)	☐ Yes ☒ No	Not applicable. The facility is a major source and not subject to this subpart.
§113.1530.	Paints and Allied Products Manufacturing Area Sources (40 CFR 63, Subpart CCCCCCC)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1535.	Prepared Feeds Manufacturing Area Sources (40 CFR 63, Subpart DDDDDDD)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.1555.	Polyvinyl Chloride and Copolymers Production Major Sources (40 CFR 63, Subpart HHHHHHH)	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.2060 through §113.2069.	Municipal Solid Waste Landfills	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.2070 through §113.2079.	Hospital/Medical/Infectious Waste Incinerators	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
§113.2100 through §113.2174.	Small Municipal Waste Combustion Units	☐ Yes ☒ No	This application does not contain sources subject to this subpart.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§113.2200 through §113.2261.	Commercial and Industrial Solid Waste Incineration Units	☐ Yes ☒ No	This application does not contain sources subject to this subpart.
Chapter 115.	**Volatile Organic Compounds**		
§115.112 through §115.119.	Storage of Volatile Organic Compounds	☐ Yes ☒ No	There is not an affected storage facility associated with this application.
§115.120 through §115.129.	Vent Gas Control	☒ Yes ☐ No	All vent gas streams will be combusted by the flare except for those meeting the applicable exemptions outlined in §115.127.
§115.131 through §115.139.	Water Separation	☐ Yes ☒ No	There is not an affected water separation unit associated with this application.
§115.140 through §115.149.	Industrial Wastewater	☐ Yes ☒ No	There is not an affected wastewater stream associated with this application.
§115.152 through §115.159.	Municipal Solid Waste Landfills	☐ Yes ☒ No	There is not an affected municipal solid waste landfill source associated with this application.
§115.160 through §115.169.	Batch Processes	☐ Yes ☒ No	There is not an affected batch process associated with this application.
§115.211 through §115.219.	Loading and Unloading of Volatile Organic Compounds	☐ Yes ☒ No	There is not an affected loading operation associated with this application.
§115.221 through §115.229.	Filling of Gasoline Storage Vessels (Stage I) for Motor Vehicle Fuel Dispensing Facilities	☐ Yes ☒ No	There is not an affected vehicle fuel dispensing facility associated with this application.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§115.234 through §115.239.	Control of Volatile Organic Compound Leaks from Transport Vessels	☐ Yes ☒ No	The sources in this application are not associated with filling or emptying gasoline tank trucks, and there are no transport vessels associated with the proposed facility.
§115.240 through §115.248.	Control of Vehicle Refueling Emissions (Stage II) at Motor Vehicle Fuel Dispensing Facilities	☐ Yes ☒ No	There is not an affected motor fuel dispensing facility associated with this application.
§115.252 through §115.259.	Control of Reid Vapor Pressure of Gasoline	☐ Yes ☒ No	The sources associated with this application do not handle, store, and/or transfer gasoline, and the proposed facility is not located in the El Paso area; therefore, these sections do not apply.
§115.311 through §115.319.	Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes	☐ Yes ☒ No	The proposed facility is not an affected process; therefore, these sections do not apply.
§115.322 through §115.329.	Fugitive Emission Control in Petroleum Refineries in Gregg, Nueces, and Victoria Counties	☐ Yes ☒ No	CPChem's facility is not a petroleum refinery or located in Gregg, Nueces, or Victoria Counties.
§115.352 through §115.359.	Fugitive Emission Control in Petroleum Refining, Natural Gas/Gasoline Processing, and Petrochemical Processes in Ozone Nonattainment Areas	☒ Yes ☐ No	CPChem will comply with the applicable requirements for petrochemical processes.
§115.410 through §115.419.	Degreasing Processes	☐ Yes ☒ No	There is not an affected degreasing process associated with this application.
§115.420 through §115.429.	Surface Coating Processes	☐ Yes ☒ No	There is not an affected surface coating facility associated with this application.
§115.430 through §115.439.	Flexographic and Rotogravure Printing	☐ Yes ☒ No	There is not an affected rotogravure or flexographic process associated with this application.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§115.440 through §115.449.	Offset Lithographic Printing	☐ Yes ☒ No	There is not an affected offset lithographic printing facility associated with this application.
§115.450 through §115.459.	Control Requirements for Surface Coating Processes	☐ Yes ☒ No	There is not an affected surface coating process associated with this application.
§115.460 through §115.469.	Industrial Cleaning Solvents	☐ Yes ☒ No	There are no industrial cleaning solvents associated with this application.
§115.470 through §115.479.	Miscellaneous Industrial Adhesives	☐ Yes ☒ No	There is not an industrial adhesive process associated with this application.
§115.510 through §115.519.	Cutback Asphalt	☐ Yes ☒ No	There is not a source of cutback asphalt associated with this application.
§115.531 through §115.539.	Pharmaceutical Manufacturing Facilities	☐ Yes ☒ No	There is not an affected pharmaceutical manufacturing facility associated with this application.
§115.540 through §115.549.	Degassing or Cleaning of Stationary, Marine, and Transport Vessels	☒ Yes ☒ No	There is not an affected facility associated with this application.
§115.552 through §115.559.	Petroleum Dry Cleaning Systems	☐ Yes ☒ No	There is not an affected petroleum dry cleaning system associated with this application.
§115.600 through §115.619.	Automotive Windshield Washer Fluid	☐ Yes ☒ No	CPChem does not sell, supply, offer for sale, distribute, or manufacture automotive windshield washer fluid as defined in §115.600.
§115.720 through §115.729.	Vent Gas Control	☒ Yes ☐ No	CPChem will comply with the applicable requirements. All vent gas streams will be combusted by the flares in accordance with §115.722 except for those meeting the applicable exemptions outlined in §115.727.

CITATION	CITATION DESCRIPTION	APPLICABLE?	COMMENT
§115.760 through §115.769.	Cooling Tower Heat Exchange Systems	☐ Yes ☒ No	There is not an affected cooling tower heat exchange system associated with this application.
§115.780 through §115.789.	Fugitive Emissions	☒ Yes ☐ No	CPChem will comply with the applicable requirements.
§115.901 through §115.916.	Alternate Means of Control	☐ Yes ☒ No	No insignificant emissions or alternate means of control are proposed.
§115.920 and §115.923.	Early Reductions	☐ Yes ☒ No	An extension of the compliance date is not requested.
§115.930 through §115.940.	Compliance and Control Plan Requirements	☒ Yes ☐ No	CPChem will comply with the applicable requirements.
§115.950.	Emissions Trading	☐ Yes ☒ No	CPChem is not participating in the emissions trading system to meet the emission control requirements.
Chapter 116.	Control of Air Pollution by Permits for New Construction or Modification	☒ Yes ☐ No	CPChem will comply with the applicable requirements.
§116.111 (a)(1)	Form PI-1 General Application	☒ Yes ☐ No	A completed Form PI-1 signed by an authorized representative is included in this application.
§116.111 (a)(2)(A)	Protection of Public Health and Welfare	☒ Yes ☐ No	The emissions from the facility will comply with all air quality rules and regulations, and with the intent of the Texas Clean Air Act, including protection of the health and physical property of the public. There are no schools within a 3,000 foot radius of the facility.
§116.130	Public Notification and Comment Procedures	☒ Yes ☐ No	CPChem will publish public notice for this permit amendment application.
Chapter 117.	**Control of Air Pollution from Nitrogen Oxides Compounds**	☐ Yes ☒ No	There is not an affected facility associated with this application.
Chapter 122.	**Federal Operating Permits**	☒ Yes ☐ No	CPChem maintains Operating Permit No. O2115.

BEST AVAILABLE CONTROL TECHNOLOGY (BACT)

As required by §116.111(a)(2)(C), any new or modified facility must use BACT, with consideration given to the technical practicability and economic reasonableness of reducing or eliminating emissions from the facility. CPChem will utilize the accepted BACT standards.

Flares – VOC, NO_x, CO, and SO_2

The flares are designed and operated in accordance with 40 CFR 60.18. The TCEQ considers flares operated in accordance with 40 CFR 60.18 to be BACT for flare operations. The flares rely on sweet natural gas to minimize emissions of SO_2.

Fugitive Emissions

Equipment leak fugitive emissions are monitored under an existing 28 VHP LDAR program with quarterly connector monitoring. Gas/vapor and light liquid flanges and connectors will be monitored quarterly at 500 ppmv. TCEQ considers this to be BACT.

NONATTAINMENT REVIEW

Nonattainment New Source Review (NNSR) permitting is required for each nonattainment pollutant for which a modification of an existing major source will result in a significant net emissions increase. TCEQ requests that net emission increases be documented for NNSR applicability purposes using applicable copies of its Table 1-F, Table 2-F and Table 3-F. CPChem has attached copies of Table 1-F and 2-F and is willing to stipulate that Table 3-F summary of contemporaneous changes for NO_x will result in higher emissions than the Table 2-F project emissions increase based on other recent projects. CPChem will offset proposed project emission increases as shown on Table 2-F for NO_x emissions. VOC emissions increases are shown to be below the netting trigger level. Nonattainment New Source Review applies only to NO_x emissions, and the only source of NO_x increases in this permit are from Flare X-901.

Note that for purposes of netting, additional affected flares that are authorized in other permits that will be amended as part of separate applications are included in the calculations and netting tables. These changes are part of the same capital project so are being included for federal NSR applicability.

NNSR Requirements

NNSR applicability is determined on pollutant-specific basis. However, because VOC and NO_x are both regulated as precursors to ozone formation, emission increases of both these pollutants must be evaluated in determining NNSR applicability in ozone nonattainment areas. The site is an existing major source of both VOC and NO_x. The project emissions increases of NO_x for this project exceed the major modification thresholds. Accordingly, this project will satisfy the following requirements for the increased NO_x emissions (see 30 TAC §116.150(d)).

(1) *The proposed facility shall comply with the lowest achievable emission rate (LAER) as defined in 30 TAC §116.12.*
(2) *All major stationary sources owned or operated by the applicant (or by any person controlling, controlled by, or under common control with the applicant) in the state must be in compliance or on a schedule for compliance with all applicable state and federal emission limitations and standards.*
(3) *At the time the new or modified facility or facilities commence operation, the emissions increases from the new or modified facilities must be offset using the offset ratio based on the area's nonattainment classification.*
(4) *The permit application must contain an analysis of alternative sites, sizes, production processes, and control techniques for the proposed source.*

LAER Sources

The definition of LAER is specified in EPA's guidance document "*New Source Review Workshop Manual (Draft), October 1990*" and 30 TAC §116.12(15) as the most stringent emission limitation derived from either of the following:

- The most stringent emission limitation contained in the implementation plan of any state for such class or category of source; or

- The most stringent emission limitation achieved in practice for such class or category of source.

Application of LAER to each new facility and for each existing facility or emissions unit at which the net emissions increase will occur as a result of a physical change or change in method of operation of the emissions unit are addressed as follows:

Flare X-901

There are no changes in process vent streams routed to the flare as part of this application. The increases in NO_x emissions re attributable entirely to ensuring the proper operation of the flare by maintaining a minimum net heating value in the combustion zone through the addition of supplemental gas. No other changes are proposed.

Since this project relates to ensuring proper operation of the flare, there is no consideration given to use of any alternative control device. The flare handles both continuous, MSS, and upset emissions, and no other control device is available that could accommodate this type of control. There are no add-on controls available to reduce NO_x emissions from a flare. As a result, CPChem proposes the proper operation in compliance with 60.18 as LAER for the NO_x emissions from the flare.

Compliance Requirement

Per 30 TAC 116.150(d)(2), CPChem will work with TCEQ in the course of the review of this permit amendment application to ensure that this requirement is satisfied and documented as appropriate.

Offset Requirement

Per 30 TAC 116.150(d)(3), CPChem will provide offsets for the project in a ratio of 1.2 to 1.0 for the facilities included in this application. An offset ratio of 1.2 to 1.0 is used due to the nonattainment status of serious for this area. CPChem proposes to offset the project increases in lieu of the contemporaneous net emissions increase. In this application, offsets will be provided only for Flare X-901, so the draft permit conditions should include only that portion of the total offset associated with Flare X-901. Offsets for other facilities will be addressed in their respective applications. The total offsets required for all projects are as follows:

NOx Offset	Proposed Emissions (tons/yr)
NOx Increase	15.54
NNSR Offsets (0.2 Portion)	3.11
Total NOx Offsets	18.65

This information may be updated in the course of the application review as project emissions are confirmed by the TCEQ. Therefore, CPChem will provide NO_x Emission Reduction Credits (ERC) as necessary.

Alternate Site Analysis

The proposed project relates to an existing flare at an existing processing plant. Relocating the project would not be feasible since the improvements must occur at this process.

Alternate Production Process Analysis

There is no known alternate production process that would further minimize the emissions associated with these operations.

Control Techniques

The new and modified sources associated with this project will utilize LAER control technology for control of NO_x emissions as described above.

TABLE 1F
AIR QUALITY APPLICATION SUPPLEMENT

Permit No.: 2462C (with others impacted)	Application Submittal Date: May 2020
Company: Chevron Phillips Chemical Company LP	
RN: RN103919817	Facility Location: 9500 I-10 East
City: Baytown	County: Harris
Permit Unit I.D.: PEU-1792	Permit Name: Flare Monitoring and Operational Changes
Permit Activity: ☐ New Source ☒ Modification	

Complete for all Pollutants with a Project Emission Increase.	**POLLUTANTS**							
	Ozone							
	VOC	**NO_x**	**CO**	**PM_{10}**	**$PM_{2.5}$**	**NO_x**	**SO_2**	**Other[1]**
Nonattainment?	Yes	Yes	No	No	No	No	No	NA
PSD?	No	No	Yes	Yes	Yes	Yes	Yes	NA
Existing site PTE (tpy)?	>100	>100	>100	>100	>100	>100	>100	NA
Proposed project emission increases (tpy from 2F[2])?	3.64	15.54	79.66	0	0	15.54	1.37	NA
Is the existing site a major source?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NA
If not, is the project a major source by itself?	NA	NA	NA	NA	NA	NA	NA	NA
If site is major source, is project increase significant?	No	Yes	No	No	No	No	No	NA
If netting required, estimated start of construction: March 2021								
5 years prior to start of construction March 2016								
Estimated start of operation June 2021								
Net contemporaneous change, including proposed project, from Table 3F. (tpy)	NA	>25	NA	NA	NA	NA	NA	NA
Major NSR Applicable?	No	Yes	No	No	No	No	No	No

[signature]	Environmental Superintendent	May 4, 2020
Signature	*Title*	*Date*

[1] Other pollutants. [Pb, H_2S, TRS, H_2SO_4, Fluoride excluding HF, etc.]

[2] Sum of proposed emissions minus baseline emissions, increases only.

The representations made above and on the accompanying tables are true and correct to the best of my knowledge.

TABLE 2F
PROJECT EMISSIONS INCREASE

Pollutant [1]: VOC	**Permit:** Various
Baseline Period: Incremental Increases **to**	

	Affected or Modified Facilities [2]		Permit	Actual Emissions [3]	Baseline Emissions [4]	Proposed Emissions [5]	Projected Actual Emissions	Difference (A-B) [5]	Correction [7]	Project Increase [8]
	FIN	EPN	NO.	(tons/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(tons/yr)
				B		A				
1	CB-710	1592-40	1504A	Incremental Inceases Only		0.13		0.13		0.13
2	FS-541-0	1796-10A	19027	Incremental Inceases Only		0.19		0.19		0.19
3	FS-9004	1799-20	46305	Incremental Inceases Only		0.01		0.01		0.01
4	P-1792	45	2462C	Incremental Inceases Only		0.52		0.52		0.52
5	Z-101	110	37063	Incremental Inceases Only		0.12		0.12		0.12
6	Z-1101	1798-22	37063	Incremental Inceases Only		0.09		0.09		0.09
7	Z-251	129	37063	Incremental Inceases Only		0.17		0.17		0.17
8	P-1592	F-1592-31	1504A	Incremental Inceases Only		0.34		0.34		0.34
9	P-1796	1796-12A	19027	Incremental Inceases Only		0.34		0.34		0.34
10	P-1799	1799-25	46305	Incremental Inceases Only		0.34		0.34		0.34
11	P-1792	F-75	2462C	Incremental Inceases Only		0.34		0.34		0.34
12	P-1791	F-130	37063	Incremental Inceases Only		0.69		0.69		0.69
13	P-1798	1798-30	37063	Incremental Inceases Only		0.34		0.34		0.34
14										
								PAGE SUBTOTAL: [9]		3.64
								Total		3.64

TABLE 2F
PROJECT EMISSIONS INCREASE

Pollutant [1]**:**	NOx/NO2	**Permit:**	Various
Baseline Period:	Incremental Increases	**to**	

	Affected or Modified Facilities [2]		Permit	Actual Emissions [3]	Baseline Emissions [4]	Proposed Emissions [5]	Projected Actual Emissions	Difference (A-B) [5]	Correction [7]	Project Increase [8]
	FIN	EPN	NO.	(tons/yr)	(ton/yr)	(tons/yr)	(ton/yr)	(tons/yr)	(ton/yr)	(tons/yr)
				B		A				
1	CB-710	1592-40	1504A	Incremental Inceases Only		1.60		1.60		1.60
2	FS-541-0	1796-10A	19027	Incremental Inceases Only		2.41		2.41		2.41
3	FS-9004	1799-20	46305	Incremental Inceases Only		0.14		0.14		0.14
4	P-1792	45	2462C	Incremental Inceases Only		6.57		6.57		6.57
5	Z-101	110	37063	Incremental Inceases Only		1.56		1.56		1.56
6	Z-1101	1798-22	37063	Incremental Inceases Only		1.15		1.15		1.15
7	Z-251	129	37063	Incremental Inceases Only		2.09		2.09		2.09
8										
9										
10										
11										
12										
13										
14										
							PAGE SUBTOTAL: [9]			15.54
								Total		15.54

TABLE 2F
PROJECT EMISSIONS INCREASE

Pollutant [1]:	CO	**Permit:**	Various
Baseline Period:	Incremental Increases	**to**	

	Affected or Modified Facilities [2]		Permit	Actual Emissions [3]	Baseline Emissions [4]	Proposed Emissions [5]	Projected Actual Emissions	Difference (A-B) [5]	Correction [7]	Project Increase [8]
	FIN	EPN	NO.	(tons/yr)	(ton/yr)	(tons/yr)	(ton/yr)	(tons/yr)	(ton/yr)	(tons/yr)
				B		A				
1	CB-710	1592-40	1504A	Incremental Inceases Only		8.17		8.17		8.17
2	FS-541-0	1796-10A	19027	Incremental Inceases Only		12.30		12.30		12.30
3	FS-9004	1799-20	46305	Incremental Inceases Only		1.22		1.22		1.22
4	P-1792	45	2462C	Incremental Inceases Only		33.49		33.49		33.49
5	Z-101	110	37063	Incremental Inceases Only		7.97		7.97		7.97
6	Z-1101	1798-22	37063	Incremental Inceases Only		5.87		5.87		5.87
7	Z-251	129	37063	Incremental Inceases Only		10.66		10.66		10.66
8										
9										
10										
11										
12										
13										
14										
							PAGE SUBTOTAL: [9]			79.66
								Total		79.66

TABLE 2F
PROJECT EMISSIONS INCREASE

Pollutant [1]:	SO2	**Permit:**	Various
Baseline Period:	Incremental Increases	**to**	

	Affected or Modified Facilities [2]		Permit	Actual Emissions [3]	Baseline Emissions [4]	Proposed Emissions [5]	Projected Actual Emissions	Difference (A-B) [5]	Correction [7]	Project Increase [8]
	FIN	EPN	NO.	(tons/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(tons/yr)
				B		A				
1	CB-710	1592-40	1504A	Incremental Inceases Only		0.141		0.141		0.141
2	FS-541-0	1796-10A	19027	Incremental Inceases Only		0.213		0.213		0.213
3	FS-9004	1799-20	46305	Incremental Inceases Only		0.013		0.013		0.013
4	P-1792	45	2462C	Incremental Inceases Only		0.580		0.580		0.580
5	Z-101	110	37063	Incremental Inceases Only		0.138		0.138		0.138
6	Z-1101	1798-22	37063	Incremental Inceases Only		0.102		0.102		0.102
7	Z-251	129	37063	Incremental Inceases Only		0.185		0.185		0.185
8										
9										
10										
11										
12										
13										
14										
							PAGE SUBTOTAL: [9]			1.37
								Total		1.37

PREVENTION OF SIGNIFICANT DETERIORATION REVIEW

As defined by 40 CFR § 52.21, PSD review does not apply as all proposed emission increases are less than the PSD major modification significance levels.

APPENDIX A
IMPACTS ANALYSIS

Texas Commission on Environmental Quality
Permit No. 2462C Amendment Application
Impacts Analysis

Chevron Phillips Chemical Company LP
Cedar Bayou Plant
Polyethylene Unit 1792

Baytown, Harris County
Customer Number CN600303614
Regulated Entity Number RN103919817

May 2020

Prepared by:

Steven P. DeNero
Sr. Air Dispersion Modeler

Approved by:

5/4/2020

Jason M. Graves, P.E.
Principal Engineer

Waid Corporation dba Waid Environmental
Certificate of Registration No. F-58
Waid Project No. CHP14091

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	2.2 Constituents to be Evaluated
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5.0	**AIR QUALITY MONITORING DATA**
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APPENDIX A: EMISSIONS SUMMARY TABLE
APPENDIX B: PLOT PLAN
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EXECUTIVE SUMMARY

Chevron Phillips Chemical Company LP (CPChem) owns and operates a petrochemical processing facility located in Baytown, Texas, referred to as the Cedar Bayou Plant. There are various operating units at the facility authorized under multiple NSR permits. CPChem operates the Polyethylene Unit (PEU-1792) as authorized under NSR Permit No. 2462C. This impacts analysis is being submitted in support of amendment application for NSR Permit No. 2462C which is being submitted concurrently.

The referenced amendment application authorizes increased emissions from Flare X-901 (EPN 45) from increased supplemental natural gas. In addition, increased emissions from equipment leak fugitives (EPN F-75) are included in this action.

This report is prepared in accordance with the TCEQ's November 2019 publication "Air Quality Modeling Guidelines"[1]. This modeling analysis will be used to demonstrate protectiveness for the PEU-1792 project. A TCEQ SCREEN3 EMEW document was also completed and submitted with this report. This report was created to provide additional clarity during the review process.

[1] https://www.tceq.texas.gov/assets/public/permitting/air/Modeling/guidance/airquality-mod-guidelines6232.pdf

SECTION 1.0

PROJECT IDENTIFICATION INFORMATION

Applicant: Chevron Phillips Chemical Company LP

Contact: Mr. Oluwatobi Adeyinka
Environmental Engineer
Chevron Phillips Chemical Company, LP
9500 I-10 East, Exit 796
Baytown, Texas 77521-9570
281-421-6285
ADEYIO@cpchem.com

Facility: Cedar Bayou Plant
Polyethylene Unit (PEU-1792)

Permit Application No.: Permit No. 2462C

Nearest City and County: Baytown, Harris County

Modeler: Waid Environmental Contact:

Steven P. DeNero
Sr. Air Dispersion Modeler
13785 Research Blvd., Suite 100
Austin, Texas 78750
(512) 255-9999

SECTION 2.0
PROJECT OVERVIEW

This report documents the modeling methodology that was used in the enclosed air dispersion modeling analysis. This report describes the models used, model inputs, and model outputs. Detailed process descriptions and process flow diagrams, as well as documentation of emission calculations, can be found in the appropriate sections of the permit amendment application and follow-up submittals. Copies of the modeling input tables are provided in Appendix A of this report.

2.1 Type of Permit Review

The air dispersion model SCREEN3 was used in this impacts analysis.

A minor NAAQS analysis is required for the increases associated with criteria pollutants. The project proposes minor emission increases of carbon monoxide (CO), nitrogen oxides (NO_x), and sulfur dioxide (SO_2) due to the proposed flaring on-site. A property line analysis is also conducted for the increase in SO_2. Since there are proposed increases in annual NO_X and SO_2, an impacts analysis concerning atmospheric formation (secondary formation) of particulate matter under 2.5µm in diameter ($PM_{2.5}$) was also conducted. Finally, a health effects review was performed for short-term and long-term emissions of non-criteria pollutants following the TCEQ's Modeling and Effects Review guidelines[2].

2.2 Constituents to be Evaluated

The applicable screening levels for criteria pollutants are provided in the table below:

Pollutants for State NAAQS and Property Line Analyses

Pollutant	Averaging Period	Applicable Threshold	Threshold Value (µg/m³)
CO	1-Hour	NAAQS SIL	2,000
CO	8-Hour	NAAQS SIL	500
NO_2	1-Hour	NAAQS SIL	7.5
NO_2	Annual	NAAQS SIL	1
SO_2	30-min	State Property Line De Minimis	14.3
SO_2	1-Hour	NAAQS SIL	7.8
SO_2	3-Hour	NAAQS SIL	25
$PM_{2.5}$	24-Hour	NAAQS SIL	1.2
$PM_{2.5}$	Annual	NAAQS SIL	0.2

2 https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/mera.pdf

Per 40 CFR 81.344[3], and following recent advice from TCEQ's ADMT, the 2010 1-hour NAAQS standard was implemented in Harris County on April 9, 2018. Therefore the 24-hour and Annual NAAQS for SO_2 are no longer required to be analyzed in Harris County. These two averaging times are not included in this report.

The table below details the non-criteria pollutants analyzed in the health effects review. The ESL values used in this analysis were found online through the TCEQ Toxicology Division website[4].

Pollutants for State Health Effects Analysis

Pollutant	CAS No.	Short-Term ESL (µg/m³)	Long-Term ESL (µg/m³)
Flare Combustion of Natural Gas	-	-	-
Methane	74-82-8	-	-
Ethane	74-84-0	-	-
Propane	74-98-6	-	-
Propylene	115-07-1	-	-
Ethylene	74-85-1	1,400	34
1-Butene	106-98-9	19,000	1,600
n-Butane	106-97-8	66,000	7,100
C5+ (as n-Pentane)	109-66-0	59,000	7,100

The TCEQ's Toxicology Screening List, found in Appendix B of the modeling guidelines, states that no impacts review is required for the combustion of natural gas from a control device. Similarly, the screening list also states that no impacts review is required for methane, ethane, propane, or propylene. Therefore, these components are not included in the impacts assessment of this report.

3 https://ecfr.io/Title-40/se40.20.81_1344
4 https://www17.tceq.texas.gov/tamis/index.cfm?fuseaction=home.welcome

SECTION 3.0

PLOT PLAN

The Cedar Bayou Plant is shown on the enclosed plot plan in Appendix B. The plot plan includes a clearly marked scale, all property lines, all associated emission points, a true north arrow, and all buildings and structures which could create downwash effects. The UTM coordinates are based on North American Datum (NAD83) system. The length, width, and heights of the buildings and structures are summarized in a table on the plot plan.

SECTION 4.0

AREA MAP

A copy of the area map submitted with the permit application is provided in Appendix C. It is an excerpt of a United States Geological Survey (USGS) 7.5-minute quadrangle. This area map displays a UTM coordinate grid, and property/fence lines.

There are no schools located within 3,000 feet of the Cedar Bayou Plant's property line.

SECTION 5.0

AIR QUALITY MONITORING DATA (for State NAAQS)

No ambient air monitoring data was required for this minor NAAQS analysis. The impacts resultant from project increases of all criteria pollutants are below all respective SIL values.

SECTION 6.0
MODELING EMISSIONS INVENTORY

6.1 On-Property Sources to be Reviewed

The initial modeling analysis only considers the emission sources with proposed emissions increases in the current project. Appendix A lists these sources and presents their representative modeling parameters.

6.2 Other On-Property and Off-Property Sources

There are no other on-property or off-property sources required for this minor NAAQS analysis.

Impacts of criteria pollutants (CO, NO_2, SO_2, and $PM_{2.5}$) were compared to the applicable significant impact level (SIL) values. Section 13 presents the results from this analysis, which show that the impacts fell under all applicable SIL values. Impacts of SO_2 from this project were also compared to the state property line de minimis level for Harris County, provided in Section 2 above. The impact of SO_2 also fell below this de minimis value. Therefore, no cumulative NAAQS analysis was required, and no additional site-wide sources were brought into the modeling analysis for these pollutants.

The proposed emissions increases in non-criteria pollutants were reviewed according to procedures specified in the MERA guidance document. The impacts from this analysis fall out of the scope of the MERA guidance prior to requiring any additional on-property sources to be analyzed.

6.3 EPN and Model Input File Source ID Number Cross-Reference

A source ID number cross-reference list can be found in Appendix A.

6.4 Stack Parameter Justification

<u>Source Types</u>

This modeling project is used to determine the off-property impacts from two sources: Flare X-901 (EPN 45) and process fugitives from piping in the PEU-1792 area (EPN F-75).

EPN 45 was represented as a flare source, with a model represented height set equal to its actual height, and a model represented heating value set equal to the hourly heating rate EPN 45 experiences.

EPN F-75 was represented as a surface-based area source, with length and width values set equal to the footprint of the process unit's equipment and a release height set conservatively low to 1 meter above ground, which is below the height of most of the equipment components considered in this analysis.

Each EPN was processed in SCREEN3 individually, and the distance from each EPN to the nearest point on the Cedar Bayou Plant property line was used as the minimum receptor distance for each EPN. Both EPN 45 and F-75 were represented in the model with a unit emission rate of 1 lb/hr.

6.5 Scaling Factors

Section 7.1 of this report describes the impact concentration scaling technique used as a preliminary determination method for all contaminants included this report.

A ratio of 1 was used to convert all emissions of NO_X to NO_2 following the ARM Tier I approach.

SECTION 7.0

MODELS AND MODELING TECHNIQUES

SCREEN3 model output was used to predict off-property unit impact concentrations from EPNs 45 and F-75 over the 1-hour, 3-hour, 8-hour, 24-hour, and annual averaging periods. The analyses for all pollutants were conducted using SCREEN3's default operating scenarios.

7.1 Impact Concentration Scaling Technique

The impacts from all of the proposed emissions increases associated with this project were determined through scaling the maximum unit impact for each EPN with their individual emission rate. Maximum unit impact in this sense refers to the highest off-property impact an individual EPN has at any off-property receptors with an emission rate of 1 lb/hr. The impacts were found as follows:

EPN Contaminant Impact = EPN Source Unit Impact * EPN Contaminant Emission Rate

For example, the 1-hour impacts of NO_2 from EPN 45 can be found as:

1-Hour NO_2 Impact = EPN 45 1-hour Avg. Unit Impact ($\mu g/m^3$)/(lb/hr)
* NO_X Hourly Emission Rate (lb/hr)
* NO_X/NO_2 Ratio
1-Hour NO_2 Impact = 0.76 ($\mu g/m^3$)/(lb/hr) * 1.597 lb/hr * 1
1-Hour NO_2 Impact = 1.21 $\mu g/m^3$

Section 13 provides the calculated output for all pollutants affected by this proposed amendment.

SECTION 8.0

SELECTION OF DISPERSION OPTION

Rural dispersion coefficients were used with the SCREEN3 program as it is the default, conservative modeling option.

SECTION 9.0

BUILDING WAKE EFFECTS (DOWNWASH)

EPN 45 is out of the range of influence of any potential downwash structures due to its height and isolated location at the Cedar Bayou Plant. Therefore downwash wake effects were not considered for EPN 45. Downwash is not applicable to fugitive emissions.

SECTION 10.0

RECEPTOR GRID - TERRAIN

The default flat terrain option was used in the SCREEN3 model for this analysis.

SECTION 11.0

RECEPTOR GRID - DESIGN

The SCREEN3 model takes a minimum and maximum distance for receptor locations to each given source modeled. The distance of each EPN to the nearest point on the property line was measured and used as the minimum distance for the receptor locations. Appendix A presents these minimum distance values. The maximum distance was kept at the default 50 km.

SECTION 12.0

METEOROLOGICAL DATA

The default 'All Stability Classes and Wind Speeds' option was used to represent the meteorological conditions within the SCREEN3 model for each source. The default anemometer height of 10 meters (32.8 feet) was also used.

SECTION 13.0

MODELING RESULTS

The following text discusses the preliminary impact determination for the minor NAAQS evaluation and health effects modeling analyses. The workbook used to determine these impacts is provided in the electronic files submitted with this analysis to facilitate review.

13.1 Secondary $PM_{2.5}$ Formation

While this amendment does not directly proposed increases in particulate matter, it does propose increases in NO_X and SO_2. Both of these compounds are considered precursor pollutants for atmospheric formation of $PM_{2.5}$. Therefore this report follows the EPA's MERP guidance to determine the amount of $PM_{2.5}$ potentially formed downwind of the Cedar Bayou Plant. This guidance is also included in the TCEQ's EMEW document, submitted with this report. The worst-case MERP values were used for this report in-lieu of justifying a less conservative option. The calculated values of $PM_{2.5}$ formation for this proposed project are :

Calculated Secondary Formation of $PM_{2.5}$

Precursor Pollutant	Project Increase	MERP Value		Secondary $PM_{2.5}$ Formation µg/m³	
		24-hour	Annual	24-hour	Annual
NO_X	6.57 tons/yr	2,649	10,397	0.00491	0.00019
SO_2	0.58 tons/yr	359	1,820		

These values represent the total impact of $PM_{2.5}$ from the proposed project, and they are below their applicable NAAQS SIL values.

13.2 Unit Impact Scaling Analysis

The scaling procedure outlined in Section 7.1 was applied to all pollutants directly affected by this proposed project. As shown on the following pages, the impacts of these emissions increases from the project are below all respective SIL, de minimis, or state significance threshold values. Therefore, the minor NSR NAAQS analysis, state property line analysis, and health effects analysis is complete.

Proposed Criteria Pollutant Emission Increases

EPN	NO_X Hourly (lb/hr)	NO_X Annual (ton/yr)	NO_2 Hourly (lb/hr)	NO_2 Annual (ton/yr)	CO Hourly (lb/hr)	SO_2 Hourly (lb/hr)
45	1.597	6.572	1.597	6.572	8.136	0.141

1.00 *NO2/NOx Hourly Ratio*
1.00 *NO2/NOx Annual Ratio*

Screen3 UIM Output

EPN	1-hr Unit Impact (µg/m³)/(1 lb/hr)	Distance to Max (m)	(ft)
45	0.76	280	919

Screen Modleing Multiplying Factors

Averaging Time	SCREEN3 Scaling Factor
3-hour	0.90
8-hour	0.70
24-hour	0.40
Annual	0.08

Source: http://www3.epa.gov/scram001/guidance/guide/EPA-454R-92-019_OCR.pdf

Impacts Analysis

EPN	NO_2 1-Hour (µg/m³)	NO_2 Annual (µg/m³)	CO 1-Hour (µg/m³)	CO 8-Hour (µg/m³)	SO_2 30-Min (µg/m³)	SO_2 1-Hour (µg/m³)	SO_2 3-Hour (µg/m³)
45	1.21	0.09	6.16	4.31	0.11	0.11	0.10
Total	**1.21**	**0.09**	**6.16**	**4.31**	**0.11**	**0.11**	**0.10**
SIL (µg/m³)	7.5	1	2,000	500	20	7.8	25
Exceeds SIL?	No	No	No	No	No	No	No

Proposed Non-Criteria Pollutant Emission Increases

	Ethylene		Butene		Butane		C5+	
EPN	Hourly (lb/hr)	Annual (ton/yr)	Hourly (lb/hr)	Annual (ton/yr)	Hourly (lb/hr)	Annual (ton/yr)	Hourly (lb/hr)	Annual (ton/yr)
F-75	0.080	0.340	0.080	0.340	0.080	0.340	0.080	0.340

C5+ as n-Pentane

Screen3 UIM Output

EPN	1-hr Unit Impact (µg/m³)/(1 lb/hr)	Distance to Max (m)	(ft)
F-75	92.06	555	1821

Screen Modleing Multiplying Factors

Averaging Time	SCREEN3 Scaling Factor
3-hour	0.90
8-hour	0.70
24-hour	0.40
Annual	0.08

Source: http://www3.epa.gov/scram001/guidance/guide/EPA-454R-92-019_OCR.pdf

Impacts Analysis

	Ethylene		Butene		Butane		C5+	
EPN	1-Hour (µg/m³)	Annual (µg/m³)	1-Hour (µg/m³)	Annual (µg/m³)	1-Hour (µg/m³)	Annual (µg/m³)	1-Hour (µg/m³)	Annual (µg/m³)
F-75	7.36	0.57	7.36	0.57	7.36	-	7.36	-
Total	**7.36**	**0.57**	**7.36**	**0.57**	**7.36**	-	**7.36**	-
10% ESL (µg/m³)	140	3.4	1,900	160	6,600	-	5,900	-
Exceeds 10% ESL?	No	No	No	No	No	*	No	*

** LT Analysis Not Required for n-Butane or n-Pentane as LT ESL >= 10% ST ESL*

SECTION 14.0

ELECTRONIC INFORMATION

Model input/output and associated computer or electronic files will be shared via the TCEQ's FTP site. The guide below provides an overview of the contents and organization of this shared directory.

File or Folder Name	Description
1 – SCREEN3	This directory contains the SCREEN3 modeling input/output files.
2 – Plots and Maps	This directory contains the plot plan, area map, and figures included in Appendix B through D.
3 – Scaling Analyses	This directory contains electronic copies of the worksheets used to carry out the MERA and NAAQS scaling procedures.

APPENDIX A

MODELING INPUT TABLES

Flare Source Representation

EPN	Description	UTM Location			Release Height		Heat Release	
		Zone	East	North	(ft)	(m)	MMBtu/hr	cal/sec
45	X-901 Flare	15	314,075	3,301,360	120	36.6	23	1,609,973

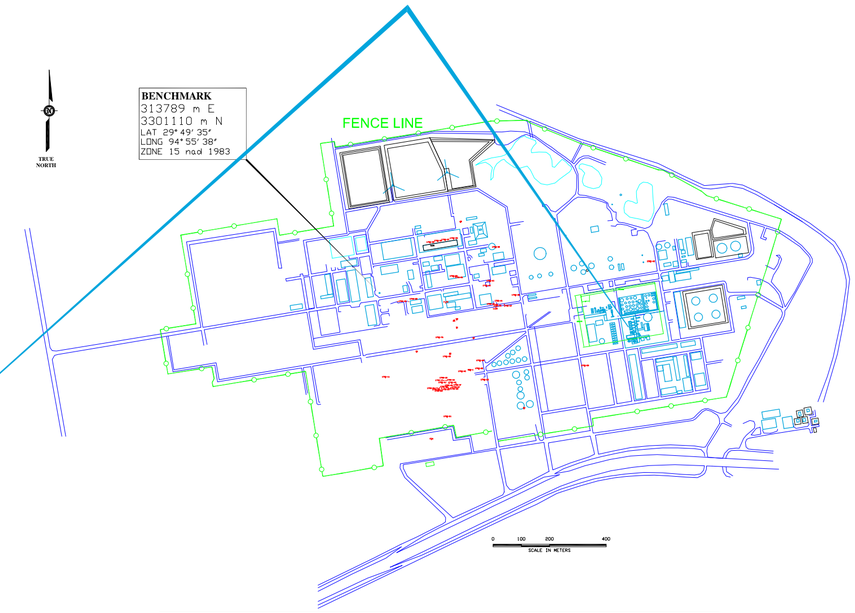
Area Source Representation

EPN	Description	UTM Location			Release Height		Area Length		Area Width	
		Zone	East	North	(ft)	(m)	(ft)	(m)	(ft)	(m)
F-75	PEU-1792 Process Fugitives	15	314,023	3,301,075	3.3	1.0	800.0	243.8	400.0	121.9

APPENDIX B

PLOT PLAN

THIS IS THE AREA THAT IS ENLARGED



Emission Point Number	Name	Location Easting, Northing (meters)
03	Spent Solvent Tank	314300, 3300700
1592-42	Holding Pond	314748, 3301219
1792-11	Solvent Storage Tank	313810, 3300810
1792-15	F-394 Baghouse	314020, 3300800
1792-16	F-395 Baghouse	314025, 3300800
1792-17	F-396 Baghouse	314015, 3300800
1792-18	F-397 Baghouse	314160, 3300800
1792-21	F-312 Bagfilter	314028, 3300670
1792-22	F-315 Bagfilter	314026, 3300882
1792-23	F-320 Baghouse	314515, 3300850
1792-35	Line 1 Pellet Dryer	313990, 3301393
1792-36	Line 2 Pellet Dryer	314037, 3301301
1792-37	Line 3 Pellet Dryer	314031, 3301320
1792-38	Line 4 Pellet Dryer	314057, 3301322
1792-39	Line 5 Pellet Dryer	313878, 3301270
1792-40	Line 6 Pellet Dryer	313837, 3301263
1792-42	Diesel Fuel Tank	314167, 3301133
1792-43	P-930 Stormwater Pump Engine	314205, 3301070
1792-44	Diesel Fuel Tank	314205, 3301070
1792-45	Stormwater Holding Tank	314270, 3301100
1792-46	API Separator	314200, 3301070
1792-47	API Skim Tank	314230, 3301070
1792-48	Stormwater Holding Pond	314200, 3301270
1792-4C	F-376 Baghouse	314080, 3300830
1792-4F	F-365 Baghouse	314060, 3300790
1792-4G	F-366 Baghouse	314045, 3300790
1792-4H	F-367 Baghouse	314035, 3300790
1792-4J	F-356 Baghouse	314010, 3300790
1792-50	Demethanizer Drum	314050, 3301167
1792-51	Depropanizer Drum	314056, 3301168
1792-76	Cooling Tower	314000, 3300950
26	H-602 Hot Oil Heater	313920, 3300900
28	Solvent Rundown Tank	314062, 3301015
29	Solvent Holding Tank	314053, 3301015
30	Methanol Tank	314121, 3300948
31	Chilled Water Methanol	314062, 3300985
45	X-901 Flare Normal Operation	314075, 3301360
F-75	Process Fugitives	314023, 3301075
F04	Pellet Losses	313972, 3300591
LL03	Slop Oil Loading	314200, 3301060
RDX-1	Catalytic Oxidizer	314096, 3300830

WAID ENVIRONMENTAL

CHEVRON PHILLIPS CHEMICAL COMPANY, LP

1-HEXENE PERMIT

Drawn By	Start Date	Rev. Date	DWG Name	Rev. No.
DWW	11/1/10	3/11/15	PLOT	7

H:\CLIENTS\CHEVRON PHILLIPS CHEM CO\CHP10491\ACAD

APPENDIX C

AREA MAP

29°49'30" N, 94°55'48" W WGS84 1994 Mont Belvieu, TX

WGS84 Zone 15R

CHEVRON PHILLIPS CHEMICAL COMPANY, LP
CEDAR BAYOU PLANT

3000 FEET

PROPERTY LINE

3000 FEET

Map created with TOPO! ©2008 National Geographic

NATIONAL GEOGRAPHIC

0.0 0.5 1.0 miles
0.0 0.5 1.0 1.5 km

TEXAS

WAID ENVIROMENTAL

CHP7634\AREAMAP.DWG

TN MN 2°

10/10/19

APPENDIX D

SCREEN3 MODELING FILES

05/01/20
13:04:25

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 13043 ***

Chevron Phillips Chemical Company - Permit 2462C

SIMPLE TERRAIN INPUTS:
SOURCE TYPE = FLARE
EMISSION RATE (G/S) = 0.126000
FLARE STACK HEIGHT (M) = 36.5760
TOT HEAT RLS (CAL/S) = 0.160997E+07
RECEPTOR HEIGHT (M) = 0.0000
URBAN/RURAL OPTION = RURAL
EFF RELEASE HEIGHT (M) = 40.8010
BUILDING HEIGHT (M) = 0.0000
MIN HORIZ BLDG DIM (M) = 0.0000
MAX HORIZ BLDG DIM (M) = 0.0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = 26.694 M**4/S**3; MOM. FLUX = 16.277 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
280.	0.1671	1	3.0	3.3	960.0	116.81	69.76	46.93	NO
300.	0.2311	1	3.0	3.3	960.0	116.81	74.11	50.92	NO
400.	0.4987	1	3.0	3.3	960.0	116.81	95.22	74.40	NO
500.	0.5494	1	2.5	2.8	800.0	132.01	116.00	107.85	NO
600.	0.5280	1	1.0	1.1	320.0	268.83	147.99	167.16	NO
700.	0.7225	1	1.0	1.1	320.0	268.83	165.66	223.05	NO
800.	0.7530	1	1.0	1.1	320.0	268.83	183.36	290.41	NO
900.	0.7064	1	1.0	1.1	320.0	268.83	201.03	368.93	NO
1000.	0.6511	1	1.0	1.1	320.0	268.83	218.64	458.50	NO
1100.	0.6028	1	1.0	1.1	320.0	268.83	236.16	559.10	NO
1200.	0.5614	1	1.0	1.1	320.0	268.83	253.57	670.76	NO
1300.	0.5255	1	1.0	1.1	320.0	268.83	270.89	793.51	NO
1400.	0.4941	1	1.0	1.1	320.0	268.83	288.09	927.43	NO
1500.	0.4665	1	1.0	1.1	320.0	268.83	305.19	1072.58	NO
1600.	0.4419	1	1.0	1.1	320.0	268.83	322.18	1229.03	NO
1700.	0.4310	2	1.0	1.1	320.0	268.83	255.81	206.20	NO
1800.	0.4370	2	1.0	1.1	320.0	268.83	268.30	218.25	NO
1900.	0.4383	2	1.0	1.1	320.0	268.83	280.74	230.43	NO
2000.	0.4359	2	1.0	1.1	320.0	268.83	293.13	242.73	NO
2100.	0.4306	2	1.0	1.1	320.0	268.83	305.47	255.13	NO
2200.	0.4231	2	1.0	1.1	320.0	268.83	317.76	267.64	NO
2300.	0.4142	2	1.0	1.1	320.0	268.83	330.00	280.24	NO
2400.	0.4044	2	1.0	1.1	320.0	268.83	342.19	292.93	NO
2500.	0.3940	2	1.0	1.1	320.0	268.83	354.34	305.70	NO
2600.	0.3834	2	1.0	1.1	320.0	268.83	366.44	318.54	NO
2700.	0.3728	2	1.0	1.1	320.0	268.83	378.49	331.46	NO
2800.	0.3625	2	1.0	1.1	320.0	268.83	390.49	344.44	NO
2900.	0.3524	2	1.0	1.1	320.0	268.83	402.45	357.48	NO
3000.	0.3427	2	1.0	1.1	320.0	268.83	414.37	370.58	NO
3500.	0.3215	3	1.0	1.2	320.0	259.41	326.59	202.18	NO

```
  4000.   0.3196        3     1.0    1.2   320.0  259.41  366.82  226.07    NO
  4500.   0.3082        3     1.0    1.2   320.0  259.41  406.63  249.92    NO
  5000.   0.2923        3     1.0    1.2   320.0  259.41  446.03  273.69    NO
  5500.   0.2888        5     1.0    1.6 10000.0  116.19  239.39   62.30    NO
  6000.   0.2928        5     1.0    1.6 10000.0  116.19  258.67   64.77    NO
  6500.   0.2942        5     1.0    1.6 10000.0  116.19  277.78   67.15    NO
  7000.   0.2936        5     1.0    1.6 10000.0  116.19  296.72   69.46    NO
  7500.   0.2915        5     1.0    1.6 10000.0  116.19  315.51   71.69    NO
  8000.   0.2882        5     1.0    1.6 10000.0  116.19  334.16   73.85    NO
  8500.   0.2841        5     1.0    1.6 10000.0  116.19  352.68   75.96    NO
  9000.   0.2793        5     1.0    1.6 10000.0  116.19  371.07   78.01    NO
  9500.   0.2742        5     1.0    1.6 10000.0  116.19  389.34   80.00    NO
 10000.   0.2687        5     1.0    1.6 10000.0  116.19  407.49   81.95    NO
 15000.   0.2122        5     1.0    1.6 10000.0  116.19  583.78   97.96    NO
 20000.   0.1736        6     1.0    2.2 10000.0   97.76  501.21   62.45    NO
 25000.   0.1558        6     1.0    2.2 10000.0   97.76  609.97   66.87    NO
 30000.   0.1406        6     1.0    2.2 10000.0   97.76  715.77   70.73    NO
 40000.   0.1159        6     1.0    2.2 10000.0   97.76  920.37   76.25    NO
 50000.   0.9861E-01    6     1.0    2.2 10000.0   97.76 1117.54   80.85    NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND   280. M:
   772.   0.7567        1     1.0    1.1   320.0  268.83  178.58  271.11    NO

 DWASH=   MEANS NO CALC MADE (CONC = 0.0)
 DWASH=NO MEANS NO BUILDING DOWNWASH USED
 DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
 DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
 DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

 *** INVERSION BREAK-UP FUMIGATION CALC. ***
  CONC (UG/M**3)   =   0.7106
  DIST TO MAX (M)  =  5248.23

     ************************************
     *** SUMMARY OF SCREEN MODEL RESULTS ***
     ************************************

 CALCULATION        MAX CONC    DIST TO   TERRAIN
  PROCEDURE        (UG/M**3)    MAX (M)    HT (M)
--------------    -----------   ---------   -------
SIMPLE TERRAIN      0.7567          772.        0.

INV BREAKUP FUMI    0.7106         5248.       --
```

04/30/20
11:07:22

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 13043 ***

Chevron Phillips Chemical Company - Permit 2462C

SIMPLE TERRAIN INPUTS:
SOURCE TYPE = AREA
EMISSION RATE (G/(S-M**2)) = 0.423830E-05
SOURCE HEIGHT (M) = 1.0000
LENGTH OF LARGER SIDE (M) = 243.8400
LENGTH OF SMALLER SIDE (M) = 121.9200
RECEPTOR HEIGHT (M) = 0.0000
URBAN/RURAL OPTION = RURAL
THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = 0.000 M**4/S**3; MOM. FLUX = 0.000 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
555.	92.06	6	1.0	1.0	10000.0	1.00	16.
600.	85.87	6	1.0	1.0	10000.0	1.00	14.
700.	75.01	6	1.0	1.0	10000.0	1.00	9.
800.	66.99	6	1.0	1.0	10000.0	1.00	0.
900.	60.51	6	1.0	1.0	10000.0	1.00	0.
1000.	54.93	6	1.0	1.0	10000.0	1.00	0.
1100.	50.13	6	1.0	1.0	10000.0	1.00	0.
1200.	45.94	6	1.0	1.0	10000.0	1.00	0.
1300.	42.22	6	1.0	1.0	10000.0	1.00	0.
1400.	38.91	6	1.0	1.0	10000.0	1.00	0.
1500.	35.96	6	1.0	1.0	10000.0	1.00	0.
1600.	33.32	6	1.0	1.0	10000.0	1.00	0.
1700.	30.96	6	1.0	1.0	10000.0	1.00	1.
1800.	28.85	6	1.0	1.0	10000.0	1.00	0.
1900.	26.94	6	1.0	1.0	10000.0	1.00	0.
2000.	25.25	6	1.0	1.0	10000.0	1.00	0.
2100.	23.76	6	1.0	1.0	10000.0	1.00	0.
2200.	22.43	6	1.0	1.0	10000.0	1.00	0.
2300.	21.22	6	1.0	1.0	10000.0	1.00	0.
2400.	20.11	6	1.0	1.0	10000.0	1.00	0.
2500.	19.09	6	1.0	1.0	10000.0	1.00	0.
2600.	18.15	6	1.0	1.0	10000.0	1.00	0.
2700.	17.28	6	1.0	1.0	10000.0	1.00	0.
2800.	16.49	6	1.0	1.0	10000.0	1.00	0.
2900.	15.74	6	1.0	1.0	10000.0	1.00	0.
3000.	15.06	6	1.0	1.0	10000.0	1.00	0.
3500.	12.40	6	1.0	1.0	10000.0	1.00	0.
4000.	10.45	6	1.0	1.0	10000.0	1.00	0.
4500.	8.967	6	1.0	1.0	10000.0	1.00	0.
5000.	7.817	6	1.0	1.0	10000.0	1.00	0.
5500.	6.896	6	1.0	1.0	10000.0	1.00	0.
6000.	6.142	6	1.0	1.0	10000.0	1.00	0.

```
  6500.    5.523        6     1.0    1.0 10000.0    1.00      0.
  7000.    5.008        6     1.0    1.0 10000.0    1.00      0.
  7500.    4.583        6     1.0    1.0 10000.0    1.00      0.
  8000.    4.216        6     1.0    1.0 10000.0    1.00      0.
  8500.    3.899        6     1.0    1.0 10000.0    1.00      0.
  9000.    3.622        6     1.0    1.0 10000.0    1.00      0.
  9500.    3.378        6     1.0    1.0 10000.0    1.00      0.
 10000.    3.162        6     1.0    1.0 10000.0    1.00      0.
 15000.    1.872        6     1.0    1.0 10000.0    1.00      0.
 20000.    1.323        6     1.0    1.0 10000.0    1.00      0.
 25000.    1.012        6     1.0    1.0 10000.0    1.00      0.
 30000.   0.8123        6     1.0    1.0 10000.0    1.00      0.
 40000.   0.5837        6     1.0    1.0 10000.0    1.00      0.
 50000.   0.4521        6     1.0    1.0 10000.0    1.00      0.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND   555. M:
   555.    92.06        6     1.0    1.0 10000.0    1.00     16.

     ************************************
     *** SUMMARY OF SCREEN MODEL RESULTS ***
     ************************************

 CALCULATION        MAX CONC    DIST TO   TERRAIN
  PROCEDURE        (UG/M**3)    MAX (M)    HT (M)
--------------    -----------   ---------   -------
SIMPLE TERRAIN       92.06          555.        0.
```

APPENDIX B

ELECTRONIC MODELING EVALUATION WORKBOOK (EMEW)

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

General

Acknowledgement:	Select from the drop down:
I acknowledge that I am submitting an authorized TCEQ Electronic Modeling Evaluation Workbook and any necessary attachments. Except for inputting the requested data, I have not changed the TCEQ Electronic Modeling Evaluation Workbook in any way, including but not limited to changing formulas, formatting, content, or protections.	I agree

Administrative Information:	
Data Type:	**Facility Information:**
Project Number (6 Digits):	314315
Permit Number:	2462C
Regulated Entity ID (9 Digits):	103919817
Facility Name:	Cedar Bayou Plant
Facility Address:	9500 I-10 East
Facility County (select one):	Harris
Company Name:	Chevron Phillips Chemical Company LP
Company Contact Name:	Mr. Gregory Goodson
Company Contact Number:	281-421-6879
Company Contact Email:	GOODSGA@CPCHEM.COM
Modeling Contact Name:	Steven DeNero
Modeling Company Name, as applicable:	Waid Environmental
Modeling Contact Number:	512-255-9999
Modeling Contact Email:	SDENERO@WAID.COM
New/Existing Site (select one):	Existing Site
Modeling Date (MM/DD/YYYY):	4/30/2020
UTM Zone (select one):	15

Sheet Instructions: Indicate in the Table of Contents which sections are applicable and included for this modeling demonstration. Select "X" from the drop down if the item below is included in the workbook. Note: This workbook is only for SCREEN3 analyses. Please use the separate Electronic Modeling Evaluation Workbook (EMEW) for the following air dispersion models: AERSCREEN, ISC/ISCPrime, and/or AERMOD.

Table of Contents

Section:	Sheet Title *(Click to jump to specific sheet):*	Select an X from the dropdown menu if included:
1	General	X
2	Model Options	X
3	Building Downwash	
4	Flare Source Parameters	X
5	Point Source Parameters	
6	Area Source Parameters	X
7	Volume Source Calculations	
8	Volume Source Parameters	
9	Point and Flare Source Emissions	X
10	Area Source Emissions	X
11	Volume Source Emissions	
12	Speciated Emissions	X
13	Intermittent Sources	
14	Modeling Scenarios	
15	Monitor Calculations	
16	Background Justification	
17	Secondary PM2.5 Analysis (MERPs calculations)	X
18	NAAQS/State Property Line (SPL) Modeling Results	X
19	Unit Impact Multipliers	X
20	Health Effects Modeling Results	X
21	Modeling File Names	X
22	Speciated Chemicals	

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

General

Included Attachments Instructions: The following are attachments that must be included with any modeling analysis. If providing the plot plan and area map with the permit application, ensure there is also a copy with the EMEW. The copy can be electronic.	**Select an X from the dropdown menu if included:**
Plot Plan:	
Instructions: Mark all that apply in the attached plot plan. For larger properties or dense source areas, provide multiple zoomed in plot plans that are legible.	
Property/Fence Lines all visible and marked.	X
North arrow included.	X
Clearly marked scale.	X
All sources and buildings are clearly labeled.	X
Area Map:	
Instructions: Mark all that apply in the attached area map.	
Annotate schools within 3,000ft of source's nearest property line.	X
All property lines are included.	X
Non-industrial receptors are identified.	Choose an item
Additional Attachments (as applicable): *Note: These are just a few examples of attachments that may need to be included. There may be others depending on the scope of the modeling analysis.*	**Select an X from the dropdown menu if included:**
Single Property Line Designation	
Include Agreement, Order, and map defining each petitioner.	Choose an item
Post Processing using Unit Impact Multipliers (UIMs)	
Include documentation on any calculations used with the UIMs (i.e., Step 3 of the MERA).	X
Modeling Techniques	
Provide documentation on modeling techniques indicated in the workbook.	Choose an item
Other Attachments *Provide a list in the box below of additional attachments being provided that are not listed above:*	
	Choose an item

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

Model Options

I. Project Information

A. Project Overview: In the box below, give a brief Project Overview. To type or insert text in box, double click in the box below. *Please limit your response to 2000 characters.*

Project is an amendment to Permit 2462C. The affected flare (EPN 45) has a proposed increase in emissions due to increased natural gas flow. The proposed increase in fugitive emissions (EPN F-75) are associated with components on streams leading to the flare for which there is increased natural gas flow. The TCEQ Toxicology Screening list includes combustion of natural gas at a control device. Therefore VOC impacts from EPN 45 are not considered in this impacts analysis, nor are the fugitive emission increases of Methane, Ethane, Propane, and Propylene, which are also on the TCEQ Toxicology Screening List. All remaining VOC components affected by this increase at F-75 were assumed to comprise 100% of the proposed increase; no compositional speciation was applied to the total VOC proposed increase. SCREEN3 was used to determine the maximum off-property Unit Impact for both EPN 45 and EPN F-75 using only default parameters in SCREEN3. These values were then scaled with the proposed emission rates and compare to the NAAQS SIL or 10% of ESL significance levels. All impacts are found to be below the significance levels. 100% conversion of NOx to NO2 was applied as a conservative approach (ARM Tier 1). Secondary formation of PM2.5 is calculated from the proposed annual increases in NOx and SO2. Per 40 CFR 81.344 (https://ecfr.io/Title-40/se40.20.81_1344), and following recent advice from TCEQ ADMT, the 2010 1-hour NAAQS standard was implemented in Harris County on April 9, 2018. Therefore the 24-hour and Annual NAAQS for SO2 are no longer required to be analyzed in Harris County, and as a result these two averaging times are not included in this report.

II. Air Dispersion Modeling Preliminary Information

Instructions: Fill in the information below based on your modeling setup. The selections chosen in this sheet will carry throughout the sheet and workbook. Based on selections below, only portions of the sheet and workbook will be available. Therefore, it is vital the sheet and workbook are filled out in order, do NOT skip around.

For larger text boxes, double click to type or insert text.

A. Building Downwash

No	Is downwash applicable? *(Select "Yes" or "No")*

B. Type of Analyses: (Select "X" in all that apply)

X	Minor NSR NAAQS	X	State Property Line
X	Health Effects		

C. Constituents Evaluating: (Select "X" in all that apply)

NAAQS: List all pollutants that require a modeling review. *(Select "X" in all that apply)*

X	SO_2		PM_{10}
X	CO		$PM_{2.5}$
	Pb	X	NO_2

Both	Identify which averaging periods are being evaluated for NO_2.
Tier 1: Full Conversion	Identify the 1-hr NO_2 tier used for SCREEN3.
Tier 1: Full Conversion	Identify the annual NO_2 tier used for SCREEN3.

State Property Line: List all pollutants that require a modeling review. *(Select "X" in all that apply)*

	H_2S	X	SO_2
	H_2SO_4		

Health Effects: Fill in the Speciated Emissions sheet with all applicable pollutants, CAS numbers, and ESLs.

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

Model Options

D. Dispersion Options: *Select "X" in the box to select an option. Note: if selecting both options, be sure to explain the reasoning for this in the box below.*

	Urban
X	Rural

Provide justification on the dispersion option selected above in the following box:

Rural was used to provide a more conservative impact assessment in lieu of justifying the urban option.

E. Meteorological Data:

Select Meteorological Dataset Modeled:	Full Meteorological Data

F. Receptor Grid:

Describe the receptor grid being modeled in the following text box:

The distance from EPN 45 and EPN F-75 to the nearest point on the property line was used as the closest receptor location. For EPN 45 this is 280 meters. For EPN F-75 this is 555 meters.

G. Terrain:

Select the terrain option being modeled:	Flat

For justification on terrain selection, fill in the box below:

Flat is the default terrain option.

H. Modeling Techniques: *Briefly describe any modeling techniques used for the SCREEN3 analyses. Provide additional attachments, if needed, to support the analyses.*

As described above, SCREEN3 was used to determine a UIM for both EPN 45 and EPN F-75. This was then applied to the proposed emission rates to create an off-property impact per pollutant. That impact was then compared to the applicable significance threshold (either SIL or 10% ESL).

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Electronic Modeling Evaluation Workbook for SCREEN3

Flare Source Parameters

Facility:

EPN	Model ID	Modeling Scenario	Easting: X [m]	Northing: Y [m]	Height [m]	Heat Release (cal/s)	Description
45	45		314075.00	3301360.00	36.58	1609972.93	Flare X-901, EPN 45

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Electronic Modeling Evaluation Workbook for SCREEN3

Area Source Parameters

Facility:

EPN	Model ID	Modeling Scenario	Easting: X [m]	Northing: Y [m]	Modeled Release Height [m]	Longer Side Length X [m]	Shorter Side Length Y [m]	Area Source Size Justification	Area Source Release Height Justification	Source Description
F-75	F-75		314023.00	3301075.00	1.00	243.84	121.92	Length and width represent footprint of process unit. Fugitive components are spread out throughout this unit.	1 meter represents a very conservative approach to this height as the affected components are almost all above this height.	Area source representing fugitive piping components at the 1792 Process Unit

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

Point + Flare Emissions

May 2020
Permit No. 2462C
Chevron Phillips Chemical Company LP

Facility:

EPN	Model ID	Modeling Scenario	Pollutant	Averaging Time	Standard Type	Review Context	Intermittent Source?	Modeled Emission Rate [lb/hr]	Basis of Emission Rate	Scalars or Factors Used?	Scalar/Factor in Use	Downwash Structure Considered	Distance to Ambient Air (m)
45	45	0	Generic	1-hr			No	1.00	Unit Impact Analysis	No			280.00

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

Area Source Emissions

May 2020
Permit No. 2462C
Chevron Phillips Chemical Company LP

Facility:

EPN	Model ID	Modeling Scenario	Pollutant	Averaging time	Standard Type	Review Context	Intermittent Source?	Modeled Emission Rate [lb/hr]	Basis of Emission Rate	Scalars or Factors Used?	Scalar/Factor in Use	Distance to Ambient Air (m)
F-75	F-75	0	Generic	1-hr			No	1.00	Unit Impact Analysis	No		555.00

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

Speciated Emissions

Speciated Emissions by Model ID

CAS #	Chemical Species	Other Species	Short-Term ESL (µg/m³)	Long-Term ESL (µg/m³)
106-98-9	1-butene		19000	1600
74-85-1	ethylene		1400	34
106-97-8	n-butane		66000	7100
109-66-0	n-pentane		59000	7100

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

Combined Emissions

EPN	Model ID	Modeling scenario	Pollutant	Modeled Averaging Time	Standard Type	Review Context	Intermittent	Source Type	Modeled Emission Rate [lb/hr]	Downwash Structure Considered
45	45	0	Generic	1-hr			No	Flare	1.00	
F-75	F-75	0	Generic	1-hr			No	Area	1.00	

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

Secondary Formation of PM2.5

Facility:

Modeled Emission Rates for Precursors (MERPs) Demonstration Tool for Calculating Secondary $PM_{2.5}$ Impacts

Precursor	Project Increases (tpy)	Source Selection	Selection of Variables		MERP Value		Total Secondary Value ($\mu g/m^3$)	
			Emission Rate (tpy)	Height (m)	24-hr	Annual	24-hr $PM_{2.5}$	Annual $PM_{2.5}$
Nitrogen Oxide (NO_x)	6.57	worst-case			2649	10397	0.00491	0.00019
Sulfur Dioxide (SO_2)	0.58	worst-case			359	1820		

MERPs Demonstration Justification	**Applicant Internal Comments**
A. Provide justification for selection of worst-case MERP and/or site-specific source here. *Please limit your response to 2000 characters.*	**All internal comments must be deleted prior to submittal.**
Worst-case selection in lieu of justifying a less conservative option.	

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

NAAQS-SPL Modeling Results

Table 1. Project-Related Modeling Results for State Property Line

Pollutant	Averaging Time	GLCmax (µg/m^3)	De Minimis (µg/m^3)
SO_2	1-hr	0.11000	14.3
H_2SO_4	1-hr		1
H_2SO_4	24-hr		0.3
H_2S	1-hr		2.16 *(If property is residential, recreational, business, or commercial)*
H_2S	1-hr		3.24 *(If property is not residential, recreational, business, or commercial)*

Table 2. Site-wide Modeling Results for State Property Line

Pollutant	Averaging Time	GLCmax (µg/m^3)	Standard (µg/m^3)
SO_2	1-hr		715
H_2SO_4	1-hr		50
H_2SO_4	24-hr		15
H_2S	1-hr		108 *(If property is residential, recreational, business, or commercial)*
H_2S	1-hr		162 *(If property is not residential, recreational, business, or commercial)*

Table 3. Modeling Results for Minor NSR De Minimis

Pollutant	Averaging Time	GLCmax (µg/m^3)	De Minimis (µg/m^3)
SO_2	1-hr	0.11000	7.8*
SO_2	3-hr	0.10000	25
SO_2	24-hr		5
SO_2	Annual		1
PM_{10}	24-hr		5
NO_2	1-hr	1.21000	7.5**
NO_2	Annual	0.09000	1
CO	1-hr	6.16000	2000
CO	8-hr	4.31000	500

Additional information for the De Minimis values listed above can be found at:
* https://www.tceq.texas.gov/assets/public/permitting/air/memos/appwso2.pdf
** https://www.tceq.texas.gov/assets/public/permitting/air/memos/guidance_1hr_no2naaqs.pdf

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

NAAQS-SPL Modeling Results

Table 4. $PM_{2.5}$ Modeling Results for Minor NSR De Minimis

Pollutant	Averaging Time	GLCmax ($\mu g/m^3$)	Secondary $PM_{2.5}$ Contribution ($\mu g/m^3$)	Total Conc. = Secondary $PM_{2.5}$ + GLCmax ($\mu g/m^3$)	De Minimis ($\mu g/m^3$)
$PM_{2.5}$	24-hr	0	0.004914936	0.00491	1.2*
$PM_{2.5}$	Annual	0	0.000190119	0.00019	0.2*

Additional information for the De Minimis values listed above can be found at:
* https://www.tceq.texas.gov/permitting/air/modeling/epa-mod-guidance.html

Table 5. Total Concentrations for Minor NSR NAAQS (Concentrations > De Minimis)

Pollutant	Averaging Time	GLCmax ($\mu g/m^3$)	Background ($\mu g/m^3$)	Total Conc. = [Background + GLCmax] ($\mu g/m^3$)	Standard ($\mu g/m^3$)
SO_2	1-hr		0	0	196
SO_2	3-hr		0	0	1300
SO_2	24-hr		0	0	365
SO_2	Annual		0	0	80
PM_{10}	24-hr		0	0	150
Pb	3-mo		0	0	0.15
NO_2	1-hr		0	0	188
NO_2	Annual		0	0	100
CO	1-hr		0	0	40000
CO	8-hr		0	0	10000

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

NAAQS-SPL Modeling Results

Table 6. Total Concentrations for Minor NSR NAAQS (Concentrations > De Minimis)

Pollutant	Averaging Time	GLCmax (µg/m^3)	Secondary $PM_{2.5}$ Contribution (µg/m^3)	Background (µg/m^3)	Total Conc. = [Background + Secondary + GLCmax] (µg/m^3)	Standard (µg/m^3)
$PM_{2.5}$	24-hr		0.004914936	0	0.00491	35
$PM_{2.5}$	Annual		0.000190119	0	0.00019	12

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

Unit Impact Multipliers

May 2020
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Chevron Phillips Chemical Company LP

Facility:

EPN	Model ID	Modeling Scenario	1-hr GLCmax ($\mu g/m^3$ per lb/hr)	3-hr GLCmax ($\mu g/m^3$ per lb/hr)	8-hr GLCmax ($\mu g/m^3$ per lb/hr)	24-hr GLCmax ($\mu g/m^3$ per lb/hr)	Annual GLCmax ($\mu g/m^3$ per lb/hr)
45	45	0	0.76	0.684	0.532	0.304	0.0608
F-75	F-75	0	92.06	82.854	64.442	36.824	7.3648

Texas Commission on Environmental Quality
Electronic Modeling Evaluation Workbook for SCREEN3
Health Effect Modeling Results

May 2020
Permit No. 2462C
Chevron Phillips Chemical Company LP

Facility:

Modeled Health Effect Results (MERA Guidance):				Step 3	Step 4: Production		Step 4: MSS		Step 5: MSS Only	Step 6	Step 7: Site Wide	
Chemical Species	CAS Number	Averaging Time	ESL [µg/m^3]	10% ESL Step 3 Modeled GLCmax [µg/m^3]	25 % ESL Step 4 Production GLCmax since most recent site wide modeling [µg/m^3]	10% ESL Step 4 Production Project Only GLCmax [µg/m^3]	50% ESL Step 4 MSS GLCmax since most recent site wide modeling [µg/m^3]	25% ESL Step 4 MSS Project Only GLCmax [µg/m^3]	Full ESL Step 5 GLCmax [µg/m^3]	Was Step 6 relied on to fall out of the MERA?	Site Wide GLCmax [µg/m^3]	Site Wide GLCni [µg/m^3]
1-butene	106-98-9	1-hr	19000	7.36								
1-butene	106-98-9	Annual	1600	0.57								
ethylene	74-85-1	1-hr	1400	7.36								
ethylene	74-85-1	Annual	34	0.57								
n-butane	106-97-8	1-hr	66000	7.36								
n-pentane	109-66-0	1-hr	59000	7.36								

Texas Commission on Environmental Quality

Electronic Modeling Evaluation Workbook for SCREEN3

Modeling File Names

May 2020
Permit No. 2462C
Chevron Phillips Chemical Company LP

Facility:

Model File Base Name	Pollutant	Averaging Time	File Extensions	Additional File Description
EPN 45.out	Generic	1-Hour	.OUT	EPN UIM
EPN F-75.out	Generic	1-Hour	.OUT	EPN UIM

Any request for portions of this application that are marked as confidential must be submitted in writing, pursuant to the Public Information Act, to the Texas Commission on Environmental Quality Public Information Coordinator, MC-197, P.O. Box 13087, Austin, Texas 78711-3087.