SPECIAL CONDITIONS

Permit Numbers 70898 and PSDTX410M3

Emission Limits, Work Practices, and Fuel Limitations

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources-Maximum Allowable Emission Rates," 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. **(PSD)**

   If any condition of this permit is more stringent than another condition, then the more stringent condition shall govern and be the standard by which compliance is demonstrated.

2. The sulfur content of plant feedstock oil, as blended and fed to the coker unit combination tower, shall not exceed 0.8 percent by weight.

3. Fuels used shall comply with the following:

   A. Fuel used in the calcining kiln, plant flares, and plant heaters shall be limited to pipeline-quality natural gas containing no more than 0.25 grain of hydrogen sulfide (H_2S) and 5 grains of total sulfur per 100 dry standard cubic feet (dscf), and plant fuel gas containing no more than 0.10 grain of H_2S per dscf. **(PSD)**

   B. Liquid fuel shall be petroleum distillate oil that is not a blend containing waste oils or solvents and contains less than 0.3% by weight sulfur.

4. Opacity of emissions from the heater stacks and calcining kiln stack shall not exceed 5 percent and 20 percent, respectively, as measured by the U.S. Environmental Protection Agency (EPA) Method 9, averaged over a 6-minute period, except for periods of cleaning of a firebox, soot blowing, equipment changes, and ash removal, but for not more than 6 minutes in any 60 consecutive minutes, nor more than 6 hours in any 10-day period. **(PSD)**

5. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel(s) and feedstock oils utilized in the plant or shall allow air pollution control agency representatives to obtain a sample for analysis. **(PSD)**

6. The green coke production rate of the coker unit, averaged over a 30-day period, shall be limited to the value appearing in the letter dated November 28, 2018, in the permit confidential file.

7. The green coke feed rate to the calcining kiln shall not exceed the value appearing in the letter dated November 28, 2018, in the permit confidential file. If the feed rate of green coke to the calcining kiln exceeds that value (as averaged over 24 consecutive operating hours) the company must notify, in writing, the appropriate Regional Office of the TCEQ; and the source may be subject to additional sampling to demonstrate continued compliance with all applicable state and federal regulations.

8. The holder of this permit shall install, calibrate, maintain, and operate a device for measuring the mass rate of green coke feed to the calcining kiln. The measuring device used must be accurate to within ±5 percent of the mass rate over the operating range. The measuring device should be calibrated, at minimum, once per year and every time the kiln is shutdown.

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

Control of Particulate Matter Emissions

9. There shall be no visible emissions from the buildings.

10. The entrance and discharge of the calcined coke storage silos shall have enclosures. These enclosures and the calcined coke truck/rail loading station shall be controlled by a dust collection system. This system's baghouse and induced draft fan shall be properly sized so as to ensure that the system's hooding, duct, and collection systems are effective in capturing emissions from these operations, to the extent that there are no visible emissions from the storage silos and less than 5 percent opacity of emissions from the truck/rail loading station as averaged over a six-minute period.

11. Coke stockpiles, coke storage pad, and adjacent roadways shall be sprinkled with water as necessary to control the emission of dust to the minimum level practicable.

12. The exposed surface of all coke loaded into railcars shall be sprayed with a chemical sealant or firmly covered prior to transport.

13. Coke dust emissions from the coke storage pad shall be controlled by maintaining the moisture content at no less than 8 percent moisture or with the use of dust suppressing agents. The TCEQ Executive Director or any local authority having jurisdiction may request the testing of the coke product to assure appropriate moisture is being maintained. When applicable, record of dust suppressants or crusting agent application shall be maintained at the plant site.

14. The dust control device identified as Emission Point No. (EPN) FD-1361 is subject to the following:

    A. Particulate matter outlet grain loading shall not exceed 0.01 grain per dscf of air from any vent. There shall be no visible emissions exceeding 30 seconds in any six-minute period as determined using EPA Test Method 22.

    B. The vents covered by this permit condition 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.

    C. The differential pressure across each device shall be monitored and be recorded at least once an hour. The pressure drop shall be at least the minimum value and shall not exceed the maximum value in the following table**:**

Dust Control Device Pressure Drop Limits			
EPN	**Source Name**	**Pressure Drop, in Inches of Water**	
		Minimum Value	**Maximum Value**
FD-1361	Barge Loading Dust Collector	1	6

D. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 0.5 inches water gauge pressure or 0.5 percent of span.

E. Quality assured (or valid) data must be generated when each control device is operating except during the performance of a daily zero check. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that each control device operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

Control of Volatile Organic Compounds (VOC)

15. The following conditions apply to the delayed coking Coke Drum De-Heading identified as EPN DC-1101X:

A. No more than the number of drum cycles from the coker (i.e., drum depressurizations to atmosphere and drum openings) appearing in the letter dated November 28, 2018, in the permit confidential file**,** may occur per year on a rolling twelve-month average.

B. Prior to depressuring the drum to atmosphere, the drum shall be routed to a flare or to the closed blowdown system.

C. The permit holder shall install, operate, calibrate, and maintain a pressure monitor capable of determining the coke drum vessel pressure. The monitor shall be calibrated annually or have a calibration check performed on an annual basis to meet an accuracy ±0.5 psig**.**

D. The coke drum shall not be depressurized and vented to atmosphere until the drum reaches a top or blowdown pressure of 7.5 psig**,** based on a five minute average.

E. The permit holder shall maintain a record of the number of coker cycles for the previous calendar month and the past consecutive 12 month period. Records of the coke drum pressure prior to depressurizing to atmosphere shall be maintained for each event to verify compliance with this condition.

16. Unless a condition of this permit states otherwise, all hydrocarbon vents and VOC truck loading arms shall be vented to a flare or to the closed blowdown system.

17. All plant flares shall be designed and operated in accordance with the following requirements:

A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each 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 them.

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 or air assist, as applicable, to each flare.

18. Naphtha shall be stored in an internal floating roof (IFR) tank. The filling rate of the IFR tank shall not exceed 12,000 gallons per hour.

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

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

B. An open-top tank containing a floating roof (external floating roof tank) which uses double seal or secondary seal technology shall be an approved control alternative to an internal floating roof tank provided the primary seal consists of either a mechanical shoe seal or a liquid-mounted seal and the secondary seal is rim-mounted. A weather shield is not approvable as a secondary seal unless specifically reviewed and determined to be vapor-tight.

C. For any tank equipped with a floating roof, the permit holder shall perform the visual inspections and seal gap measurements as specified in 40 CFR § 60.113b Testing and Procedures (as amended at 54 FR 32973, Aug. 11, 1989) to verify fitting and seal integrity. Records shall be maintained of the dates seals were inspected and seal gap measurements made, results of inspections and measurements made (including raw data), and actions taken to correct any deficiencies noted.

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

E. 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. For the purposes of this paragraph, decant oil tanks with insulated sides are considered as if the roofs were also insulated. Storage tanks must be equipped with permanent submerged fill pipes.

F. 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 pounds per square inch, absolute, VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures.

Emissions for tanks shall be calculated using: the TCEQ publication titled “Technical Guidance Package for Chemical Sources - Storage Tanks.”

G. The permit holder shall maintain a record of tank throughput for the previous month and the past consecutive 12 month period for each tank.

19. Naphtha tank truck loading vapors shall be routed to a plant flare. Naphtha tank trucks shall not be loaded unless the vapor collection system is properly connected and the entire collection and flare system is working as designed. Prior to loading, trucks shall be pressurized with nitrogen to confirm that vents on the truck are leak tight. Captured vapors from truck loading operations shall be sent to the flare. The vent hose and loading line shall be purged, with nitrogen, to the flare upon completion of loading.

20. Barge loading vapors during loading of naphtha shall be routed through a vacuum-assisted loading rack to the dock flare. Barges shall not be loaded unless the vapor collection system is properly connected and the entire collection and flare system is working as designed. The holder of this permit shall develop a checklist which operators should review, prior to loading, to ensure the collection system is operating properly. The holder of this permit shall report under Title 30 Texas Administrative Code §§ 101.201 or 101.211 (30 TAC §§ 101.201 or 101.211) any time the flare and/or collection system are not working properly.

21. The calciner incinerator shall achieve 99 percent control of the volatile organic compounds or total hydrocarbon waste gas directed to it. This shall be ensured by maintaining the temperature in or immediately downstream of, the combustion chamber above 1600°F prior to the initial stack test performed in accordance with Special Condition (SC) No. 22. Following the completion of that stack test, the six minute average temperature shall be maintained above 1600°F.

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 monitor shall be installed, calibrated at least annually, and maintained according to the manufacturer's specifications. The device shall have an accuracy of ±2 percent of the temperature being measured expressed in degrees Fahrenheit.

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

22. 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 Calciner Main Stack (EPN CA-1621X) to demonstrate compliance with the maximum allowable emission rates table (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 EPA Reference Methods. Stack sampling pursuant to this permit condition took place on January 20 and 21, 2015.

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 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 Calciner Main Stack (EPN CA-1621X) to be tested for include (but are not limited to) nitrogen oxides (NO_x), carbon monoxide (CO), particulate matter (PM_{10}), and sulfur dioxide (SO_2).

C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities (or increase in production, as appropriate) 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 TCEQ Regional Office.

D. The facility being sampled shall operate at maximum production rate 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, if the maximum production rate is greater than 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.

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.

23. **Piping, Valves, Connectors, Pumps, Agitators and Compressors, in contact with VOC - Intensive Directed Maintenance – 28MID**

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

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

The exempted components may be identified by one or more of the following methods:
(1) piping and instrumentation diagram (PID);
(2) a written or electronic database or electronic file;
(3) color coding;
(4) a form of weatherproof identification; or
(5) designation of exempted process unit boundaries.

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

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

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

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

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

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

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

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

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph.
An approved gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

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

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

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

H. Damaged or leaking valves, connectors, compressor seals, pump seals, and agitator seals found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown 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. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

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

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

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

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

$$(Vl + Vs) \times 100/Vt = Vp$$

Where:

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

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

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

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

K. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions 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.

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.

Federal Applicability

24. These facilities shall comply with all applicable requirements of EPA regulations on NSPS promulgated in 40 CFR Part 60:

A. Subpart A, General Provisions. **(PSD)**

B. Subpart Ka, Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984.

C. Subpart Kb, Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. **(PSD)**

Additional Loading Conditions

25. The VOC loading operations are limited to feedstock oil, gas oil, naphtha, light coker naphtha, gasoline (plant fuel only), and diesel (plant fuels use only).

All loading shall be submerged and rolling 12-month rack throughput records shall be updated on a monthly basis for each product loaded.

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

26. All 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.

Recordkeeping

27. The following information and any other recordkeeping information required in this permit shall be recorded and maintained by the holder of this permit in a form suitable for inspection for a period of at least five years after collection and shall be made immediately available upon request to TCEQ personnel:

    A. The green coke production rate of the coker unit in tons/day, averaged over a 30-day period.

    B. Hourly green coke feed rates to the calcining kiln recorded no more than 60 minutes apart and as averaged over 24-hour periods.

    C. Monthly plant fuel gas or natural gas usage rates by combustion units.

    D. Monthly records of on-line time for all combustion units (i.e., incinerator, process heaters, and the calcining kiln). **(PSD)**

    E. Naphtha production rates, compiled every month.

    F. Volume of naphtha loaded to barges and tank trucks, summed on a monthly basis by each category.

    G. Hours that the barge dock flare and/or related collection system is inoperable and corrective action taken (see SC No. 20).

    H. Percent sulfur content, by weight, of the plant feedstock oil, as blended and fed to the coker unit on a per batch basis.

    I. Records of the calibrations performed on the green coke mass rate measuring device (noted as percent accuracy) required in SC No. 8.

    J. Records of leak checks on tank trucks (see SC No. 19) to include date of occurrence and truck identification.

    K. Sample caustic solution and fuel gas, then check for percent spent and H_2S, respectively twice per each 12-hr shift (see SC No. 3A).

    L. Records of the calibrations performed on the incinerator outlet temperature monitoring device (noted as percent accuracy) required in SC No. 21.

Wastewater Conditions

28. Process wastewater shall be conveyed in a piped/covered system to the Wastewater Treatment Station.

29. Water seals shall be checked by visual or physical inspection quarterly for indications of low water levels or other conditions that would reduce the effectiveness of water seal controls. Water seals shall be restored as necessary within 24 hours. Records shall be maintained of these inspections and corrective actions taken.

30. The daily wastewater flow into the wastewater treatment plant shall be monitored and recorded. The rolling 12-month wastewater flow shall be totaled on a monthly basis.

31. Wastewater treatment plant emissions shall be estimated every month using the following procedure.

    A. The permit holder shall sample the wastewater prior to the API separator or CPI, monthly to determine the concentrations of all air contaminants. The influent wastewater flow rates shall be measured and recorded when a sample required by this condition is collected. Records of sampling results shall be maintained for all air contaminants.

    B. Records of sampling location, sampling procedures, sample chain of custody forms, test methods, sampling results, calculated emission rates, and sample of calculations shall be maintained.

Cooling Tower Conditions

32. The cooling towers identified as EPNs EF-1620 and EF-1621 shall be operated and monitored in accordance with the following:

    A. The cooling tower water shall be monitored monthly for VOC leakage from heat exchangers in accordance with the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or another air stripping method approved by the TCEQ Executive Director.

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

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

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

    D. Total dissolved solids (TDS) shall not exceed 5000 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.

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

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

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

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

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

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

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

(2) The analysis method for conductivity shall be either ASTM D1125-14 Test Method A (field or routine laboratory testing) or ASTM D1125-14 Test Method B (continuous monitor). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.

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

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

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.

H. Paragraphs C through G of this special condition become effective on November 1, 2020.

Compliance Assurance Monitoring (CAM)

33. The following requirements apply to the capture systems for the control devices identified as EPN CA-1621X and EPN CB-1701.

    A. The capture system for the control device identified as EPN CA-1621X shall comply at least once a year with one of the following:

        (1) Inspect any fan and verify proper operation and inspect the capture system to verify there are no cracks, holes, tears, and other defects; or

        (2) verify there are no fugitive emissions escaping from the capture system by performing a visible emissions observation for a period of at least six minutes in accordance with 40 CFR Part 60, Appendix A, Test Method 22.

    B. Each capture system for the control devices identified as EPN CA-1621X and EPN CB-1701 shall comply with one of the following:

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

    C. The control devices shall not have a bypass, except as authorized in D of this condition.

    D. The control device identified as EPN CA-1621X shall be equipped with a flow indicator or a position switch 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.

    E. The requirements in C and D of this condition do not apply to high point vent and low point drain valves. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when required to be in service per this permit.

    F. If any of the inspections under A, B and D of this condition is not satisfactory, the permit holder shall promptly take necessary corrective action. Records shall be maintained documenting the performance and results of the inspections required in this condition.

Permits by Rule (PBRs) and Standard Permits (SPs)

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

Authorization	Source or Activity
PBR No. 42506	Outdoor abrasive blast cleaning.
SP No. 108776	EPNs FD-1353 (Silo Dust Collector), FD-1359 (Dust Collector Mounted on JD-1359), and FD-1362A. (West Bagging Station Dust Collector)
PBR No. 121507	EPNs FD-1922 (Coke Dust Silo Baghouse) and FD-1923 (Coke Dust Truck Loading Chute Baghouse)
Unregistered PBR under §106.511	Emergency generator

Date: November 13, 2020