

Statement of Basis of the Federal Operating Permit

Chevron Phillips Chemical Company, LP

Site/Area Name: Polyethylene Unit (PEU 1792)

Physical location: 9500 Interstate 10 E

Nearest City: Baytown

County: Harris

Permit Number: O2115

Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2869

SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

- A description of the facility/area process description;
- A description of the revision project;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: January 3, 2014

Operating Permit Basis of Determination

Description of Revisions

The amendment to NSR permit 83791 issued on December 06, 2012 was incorporated into the permit. The NSR permits 46783, 53752, and 80099 were voided and consolidated into NSR permit 2462C on July 17, 2013.

The emission units 1792-4A and 1792-19 were removed from the permit.

The units F-75-G and FO4-G were removed because they are already represented on the permit as F-75 and FO4. The name and description of the units F-75 and FO4 were revised.

The NSR authorization for unit U905 was updated. 40 CFR Part 63, Subpart ZZZZ requirements were added to the emission unit.

The emission units V-406, V-407, and V-901 were added to the NSR authorization list because these emission units do not have applicable requirements.

The special terms and conditions in the permit were updated.

Permit Area Process Description

Fresh ethylene gas supplied by an underground pipeline is compressed in four parallel compressors then routed to all six lines of PEU 1792. The fresh ethylene is combined with recycled, unreacted ethylene gas and additives (for control of polymer properties) prior to entering the secondary compressors in preparation for reaction. The compressed ethylene gas is then sent to the reactors (one per line) where catalyst is added and the molten polyethylene resin is made. Propane is stored in three pressure vessels and is injected into the reaction in small quantities to impart certain qualities in the polyethylene product. After reaction the polyethylene and un-reacted ethylene gas flow from the reactors to the high-pressure separators (one per line). The liquid polymer product flows to the bottom of these separators and is subsequently reduced in pressure. Un-reacted ethylene from the low-pressure separator is sent to the feedstock purification system and then recycled back into the process. The liquid polymer flows from the bottoms of the low-pressure separators into the pelletizing extruders (one per line) where it is cut into pellets in underwater pelletizers (one per line) and then dried in centrifugal driers (one per line). At lines 1 - 4, the dried pellets are conveyed to the hourly rundown hoppers (two per line), where moist air and ethylene diffusing from the polyethylene pellets is exhausted to the atmosphere through screened collector/filters designed to capture most of the particulate matter in the purge air. At lines 5 and 6, the rundown hoppers (two per line) exhaust to a catalytic converter system for destruction of VOC=s. Polyethylene pellets and particulate matter collected in the filters is recycled offsite. A purge air system supplies heated air for purging the rundown hoppers. A pneumatic Apush@ type transfer system is used for transferring pellets from the rundown hoppers to pellet blending hoppers or storage silos. The storage silos vent to the atmosphere. Because the polyethylene pellets produced at different times have slightly different physical properties, the pellets go through a blending step at the end of the process that is designed to yield a final product with consistent properties. These are six blend silos that are continuously purged with air to remove particulate fines and hydrocarbons. This purge system includes an exhaust fan/blower and fabric filter that vents to the atmosphere. Part of this stream is diverted to a catalytic converter system for destruction of VOC=s. The raw polyethylene product is then transferred from the silos to the hopper car loading area and then to a warehouse for packaging or to compounder silos for further processing. Hopper car loading stations are used for bulk shipments of polyethylene. The facilities include scalperators with their related equipment and hopper car loading stations. In this equipment the polyethylene is mechanically processed to insure a uniform pellet size prior to entering the hopper car. The oversize pellets and particulates from the scalperators drop into the recycle bins. A purge air system is also used for purging the hopper loading stations. Three dust collectors are provided at the loading facilities for removing fines and

fluff from the pellets before venting to the atmosphere. An additional dust collector is also provided at the loading facilities for removing fines from conveying and purge air before venting to the atmosphere.

The un-reacted gaseous ethylene remaining after the polymerization flows from the top of the six high-pressure separators and is recycled to the suction of the secondary compressors. In this section, booster compressors collect un-reacted ethylene gas from the low-pressure separators, primary compressor packing vents, and booster compressor packing vents. This stream is then fed to an ethylene-ethane splitter column where approximately two-thirds of the ethane is removed. The column reflux accumulator automatically vents any inerts entering with the feed to a vent gas recovery system at Ethylene Unit (EU 1592). The overhead product is then pumped to a de-methanizer where methane and CO₂ are removed. The column bottoms product, purified ethylene, is fed to reciprocating pumps for re-pressurization and then recycled back to the compression-reaction area. These pumps have been fitted with a nitrogen purge to the flare system to control VOC emissions. The ethane and heavier components removed from the ethylene in the ethylene-ethane splitter column are combined with an ethane stream from existing facilities and fed to the de-ethanizer column. The ethane from the overhead product accumulator is vented to the existing vent gas recovery system in EU 1592. The de-ethanizer bottoms contain mainly propane and catalyst solvent and are pumped to the de-propanizer column. The propane overhead product is pumped from the reflux accumulator to storage for recycling. Non-condensibles are vented from the accumulator to the booster compressors for recovery. This flow is normally zero. The de-propanizer bottoms that contain solvent and heavy oils are purified in the solvent column. Any propane in the feed is vented from the flash tank to the existing gas booster compressors for recovery. The solvent accumulator and storage tank are nitrogen blanketed. A water wash system removes methanol from the solvent, and the wastewater is sent through an API separator. The heavy oils from the column bottoms are pumped to slop oil storage. The product solvent is pumped to storage.

The raw polyethylene product is stored in silos. Prior to shipment to customers, various liquid and/or solid additives are mixed with the pellets in order to customize the properties of the polyethylene. There are no emissions associated with these additives, as none of them are volatile. The raw polyethylene is pneumatically conveyed to the feed hopper above the feeder and any particulate matter is vented through the mixer vent blower and filter. The polyethylene is mixed with the appropriate solid or liquid additives at metered rates in a twin screw continuous mixer. The compounded material is then extruded and pelletized in an underwater pelletizer. The pellets are dried in a centrifugal dryer and conveyed to hourly hold up hoppers. After testing the finished pellets are conveyed to storage.

A hot oil heating system consisting of a natural gas fired heater, a system holding tank, and distribution pumps is designed for peak loads during start-up conditions in the compression-reaction area. A propylene refrigeration system in the feedstock purification section consists of one propylene compressor with auxiliary coolers and flash tanks. The system supplies refrigerant to the ethylene-ethane splitter, de-methanizer, and de-ethanizer. Make-up propylene is added as needed from EU 1592. The flare system consists of large collection headers in the reaction-compression and purification area. These headers are designed for peak loads, which can occur during accidental system over-pressures and emergency situations. The flare stack and tip are designed to burn peak flaring loads with minimal visible emissions. The cooling tower for PEU 1792 was originally installed with lines 1 - 4 and later expanded with the addition of lines 5 and 6. The cooling water return is sampled weekly and analyzed for ethylene and propylene by gas chromatograph in order to identify any leaks from heat exchangers that need to be repaired.

FOPs at Site

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O2113, O2114, O2370, O3247

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, PM, NOX, HAPS, CO
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Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - Additional Monitoring Requirements
 - New Source Review Authorization Requirements
 - Compliance Requirements
 - Protection of Stratosphere Ozone
 - Permit Location
 - Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary
 - Unit Summary
 - Applicable Requirements Summary
 - Additional Monitoring Requirements
 - Permit Shield
 - New Source Review Authorization References
 - Compliance Plan
 - Alternative Requirements
- Appendix A
 - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While

NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A. for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	No
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.

3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or, in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
P-930	30 TAC Chapter 117, Subchapter B	R7303-01	Type of Service = Existing diesel fuel-fired engine, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average that has not been modified, reconstructed or relocated on or after October 1, 2001
P-930	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	Brake HP = Stationary RICE with a brake hp greater than or equal to 100 and less than 250 hp. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use. Stationary RICE Type = Compression ignition engine
U905	30 TAC Chapter 117, Subchapter B	R7303-01	Type of Service = Existing diesel fuel-fired engine, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average that has not been modified, reconstructed or relocated on or after October 1, 2001
U905	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use. Stationary RICE Type = Compression ignition engine
PORTTANK	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)
TK-405	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK-405	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = After June 11, 1973 And on or before March 8, 1974 Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less
TK-405	40 CFR Part 63, Subpart FFFF	63FFFF	CONSTRUCTION/MODIFICATION DATE = Construction or reconstruction commenced on or before April 4, 2002. STORAGE CAPACITY = Storage capacity of the tank is 10,000 gallons or greater. MAXIMUM TRUE VAPOR PRESSURE = Maximum true vapor pressure of the stored material is 6.9 kPa or greater.
TK-902	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)
TK-903	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)
TK-904	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia

Unit ID	Regulation	Index Number	Basis of Determination*
V-419-DRUM	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
V-420-DRUM	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
V-912	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
LL03	30 TAC Chapter 115, Loading and Unloading of VOC	R5100-01	30 TAC CHAPTER 115 (REG V) CONTROL DEVICE TYPE = No control device. 30 TAC CHAPTER 115 (REG V) FACILITY TYPE = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. ALTERNATE CONTROL REQUIREMENT (ACR) [REG V] = Using the 90% overall control option specified in 30 TAC § 115.213(b). VAPOR TIGHT = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. PRODUCT TRANSFERRED = Volatile organic compounds other than liquefied petroleum gas and gasoline. TRANSFER TYPE = Only loading. TRUE VAPOR PRESSURE [REG V] = True vapor pressure is greater than or equal to 0.5 and less than 11.0 psia, the overall emission controls are at least 90%, and an initial control plan and annual report has been submitted. DAILY THROUGHPUT [REG V] = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized. CONTROL OPTIONS = Vapor control system that maintains a control efficiency of at least 90%.
H-602	30 TAC Chapter 117, Subchapter B	R7310-02	DILUENT CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. FUEL FLOW MONITORING = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). UNIT TYPE [REG VII] = Process heater CO EMISSION LIMITATION = Title 30 TAC § 117.310(c)(1) 400 ppmv option MAXIMUM RATED CAPACITY [REG VII] = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr. CO MONITORING SYSTEM = Emissions are monitored using methods other than CEMS or PEMS. NOX EMISSION LIMIT BASIS [REG VII] = Emission limit basis is not a 30 day rolling average or a block one-hour average NOX REDUCTION = No NO _x control method FUEL TYPE #1 [REG VII] = Natural gas NOX MONITORING SYSTEM = Maximum emission rate testing [in accordance with 30 TAC § 117.8000] NOX EMISSION LIMITATION = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)
X-901	30 TAC Chapter 111, Visible Emissions	R1111-01	ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used under conditions other than emergency or upset conditions.

Unit ID	Regulation	Index Number	Basis of Determination*
X-901	30 TAC Chapter 115, HRVOC Vent Gas	R5722-01	<p>MONITORING REQUIREMENTS = Flare is complying with the continuous monitoring requirements of § 115.725(d). OUT OF SERVICE = Flare was not permanently out of service by April 1, 2006.</p> <p>§115.725(e) REQUIREMENTS = Flare is complying with the requirements of § 115.725(d). TOTAL GAS STREAM = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time. GAS STREAM CONCENTRATION = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time. MULTI-PURPOSE USAGE = Flare is used for abatement of emissions from scheduled or undcheduled maintenance, startup or shutdown activities AND as an emergency flare. EXEMPT DATE = Flare has not become exempt. FLOW RATE = Flow rate of the gas routed to the flare is determined using the requirements of § 115.725(d)(1). ALTERNATIVE MONITORING = No alternative monitoring and test methods are used. PHYSICAL SEAL = Flare is equipped with a flow monitor or indicator. MINOR MODIFICATION = No minor modifications to the monitoring and test methods are used. TANK SERVICE = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC. FLARE TYPE = Flare is in multi-purpose service.</p>
X-901	40 CFR Part 63, Subpart A	63A-01	<p>REQUIRED UNDER 40 CFR 63 = Flare is required by a Subpart under 40 CFR Part 63. HEAT CONTENT SPECIFICATION = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). FLARE ASSIST TYPE = Steam assisted FLARE EXIT VELOCITY = Flare exit velocity is less than 60 ft/s (18.3 m/sec) HEATING VALUE OF GAS = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).</p>
X-901	40 CFR Part 63, Subpart A	63A-02	<p>REQUIRED UNDER 40 CFR 63 = Flare is required by a Subpart under 40 CFR Part 63. HEAT CONTENT SPECIFICATION = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). FLARE ASSIST TYPE = Steam assisted FLARE EXIT VELOCITY = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). HEATING VALUE OF GAS = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).</p>
X-901	40 CFR Part 63, Subpart A	63A-03	<p>REQUIRED UNDER 40 CFR 63 = Flare is required by a Subpart under 40 CFR Part 63. HEAT CONTENT SPECIFICATION = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). FLARE ASSIST TYPE = Steam assisted FLARE EXIT VELOCITY = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). HEATING VALUE OF GAS = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm).</p>

Unit ID	Regulation	Index Number	Basis of Determination*
F-75	30 TAC Chapter 115, HRVOC Fugitive Emissions	R5781	<p>Agitators = The fugitive unit contains agitators.</p> <p>Compressor Seals = The fugitive unit contains compressor seals.</p> <p>Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines.</p> <p>Process Drains = The fugitive unit does not contain process drains.</p> <p>Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC.</p> <p>Valves (not pressure relief, open-ended or bypass line valves) = The fugitive unit contains valves other than pressure relief, open-ended or bypass line valves.</p> <p>Weight Percent HRVOC = Components in the fugitive unit contact process fluids that contain less than 5.0% HRVOC by weight and process fluids that contain HRVOC at 5.0%, or greater, by weight on an annual average basis.</p> <p>Bypass Line Valves = The fugitive unit contains bypass line valves.</p> <p>Flanges or Other Connectors = The fugitive unit contains flanges or other connectors.</p> <p>Heat Exchanger Heads, etc. = The fugitive unit contains heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolter manways, hatches, sump covers, junction vent boxes or covers and seals on VOC water separators.</p> <p>Pressure Relief Valves = The fugitive unit contains pressure relief valves.</p> <p>Pump Seals = The fugitive unit contains pump seals.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
F-75	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	<p>SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.</p> <p>COMPRESSOR SEALS/VOC SERVICE [REG V] = YES</p> <p>FLANGES = YES</p> <p>OPEN-ENDED VALVES ANDLINES = YES</p> <p>PRESSURE RELIEF VALVES IN GASEOUS VOC SERVICE [REG V] = YES</p> <p>PROCESS DRAINS/VOC SERVICE [REG V] = YES</p> <p>PUMP SEALS IN VOC SERVICE [REG V] = YES</p> <p>RUPTURE DISKS = RELIEF VALVES EQUIPPED WITH A RUPTURE DISK OR VENTING TO A CONTROL DEVICE ARE IN USE.</p> <p>VALVES OTHER THAN PRESSURE RELIEF OR OPEN-ENDED/VOC SERVICE [REG V] = YES</p> <p>ACR FOR FLANGES = NO</p> <p>ALTERNATE CONTROL REQUIREMENT (ACR)-- VALVES [REG V] = NO</p> <p>ALTERNATE CONTROL REQUIREMENT (ACR)--COMPRESSOR SEALS [REG V] = NO</p> <p>ALTERNATE CONTROL REQUIREMENT (ACR)--PRESSURE RELIEF VALVES [REG V] = NO</p> <p>ALTERNATE CONTROL REQUIREMENT (ACR)--PROCESS DRAINS [REG V] = NO</p> <p>ALTERNATE CONTROL REQUIREMENT (ACR)--PUMP SEALS [REG V] = NO</p> <p>INSTRUMENTATION SYSTEMS = FUGITIVE UNIT HAS INSTRUMENTATION SYSTEMS THAT MEET 40 CFR § 63.169</p> <p>SAMPLING CONNECTON SYSTEMS = FUGITIVE UNIT HAS SAMPLING CONNECTION SYSTEMS THAT MEET 40 CFR § 63.169</p> <p>COMPLYING WITH §115.352(1) = YES</p> <p>COMPLYING W/ 30 TAC 115.352(1)--PROCESS DRAINS = YES</p> <p>TVP LESS THAN OR EQUAL TO 0.002 PSIA = FUGITIVE UNIT HAS COMPONENTS THAT CONTACT A PROCESS FLUID CONTAINING A PROCESS FLUID CONTAINING VOC HAVING A TRUE VAPOR PRESSURE OF 0.002 PSIA OR LESS</p> <p>TVP LESS THAN OR EQUAL TO 0.044 PSIA AT 68 DEGREES F--PROCESS DRAINS [REG V] = PROCESS FLUID HAS A TRUE VAPOR PRESSURE (TVP) LESS THAN OR EQUAL TO 0.044 PSIA AT 68 DEGREES FAHRENHEIT</p> <p>TVP OF PROCESS FLUID LESS THAN OR EQUAL TO 0.044 PSIA = YES</p> <p>TVP OF PROCESS FLUID VOC <= 0.044 PSI @ 68° = YES</p> <p>TVP OR PROCESS FLUID LESS THAN OR EQUAL TO 0.044 PSIA = NO</p> <p>REMAINING SEALS COMPLY WITH 115.352(1)--PUMP SEALS [REG V] = YES</p> <p>TVP GREATER THAN 0.044 PSIA AT 68 DEGREES F--PROCESS DRAINS [REG V] = PROCESS FLUID HAS A TRUE VAPOR PRESSURE (TVP) GREATER THAN 0.044 PSIA AT 68 DEGREES FAHRENHEIT</p> <p>TVP OF PROCESS FLUID > 0.044 PSIA = YES</p> <p>TVP OF PROCESS FLUID LESS THAN OR EQUAL TO 0.044 PSIA = YES</p> <p>TVP OF PROCESS FLUID VOC > 0.044 PSIA @ 68° F = YES</p> <p>Complying With § 115.352(1) = YES</p>
F-75	40 CFR Part 63, Subpart FFFF	63FFFF-01	Existing Source = Fugitive unit contains equipment in an existing Miscellaneous Chemical Processing Unit.

Unit ID	Regulation	Index Number	Basis of Determination*
E-501/502	30 TAC Chapter 115, HRVOC Cooling Towers	R5760	<p>COOLING TOWER HEAT EXCHANGE SYSTEM EXEMPTIONS = The cooling tower heat exchange system does not qualify for an exemption.</p> <p>JACKETED REACTOR = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.</p> <p>ALTERNATIVE MONITORING = Complying with the specified monitoring in 30 TAC § 115.764.</p> <p>DESIGN CAPACITY = Design capacity to circulate 8000 gpm or greater.</p> <p>FINITE VOLUME SYSTEM = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).</p> <p>MODIFIED MONITORING = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.</p> <p>FLOW MONITORING/TESTING METHOD = Choosing to use the maximum potential flow rate based on the manufacturer's pump performance data in accordance with §115.764(e)(1).</p> <p>TOTAL STRIPPABLE VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).</p> <p>ON-LINE MONITOR = A continuous on-line monitor capable of providing total HRVOC and specified HRVOCs in ppbw is being used.</p>
G-214	30 TAC Chapter 115, Water Separation	R5131-01	<p>ALTERNATE CONTROL REQUIREMENT (ACR) [REG V] = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.</p> <p>EXEMPTION FROM CONTROL REQUIREMENTS OF 115.132 [REG V] = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.</p>
Fo4	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.</p>
GRP1792VNT-1	30 TAC Chapter 111, Visible Emissions	R1111-01	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GRP1792VNT-1	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.</p> <p>40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration = VOC concentration is less than 612 ppmv.</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.</p>
GRP1792VNT-2	30 TAC Chapter 111, Visible Emissions	R1111-02	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GRP1792VNT-2	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.</p> <p>40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration = VOC concentration is less than 612 ppmv.</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.</p>
GRP1792VNT-3	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.</p> <p>40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration = VOC concentration is less than 612 ppmv.</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GRP1792VNT-4	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which no more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.</p> <p>40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration = VOC concentration is less than 612 ppmv.</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.</p>
H-3030	30 TAC Chapter 115, Vent Gas Controls	R5121-01	<p>Chapter 115 Division = The vent stream originates from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p>
P-930	30 TAC Chapter 111, Visible Emissions	R1111-02	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>
U905	30 TAC Chapter 111, Visible Emissions	R1111-02	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>
X-901-VNT	30 TAC Chapter 115, HRVOC Vent Gas	R5722-01	<p>HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft³/hr).</p> <p>Exempt Date = The vent gas stream is not exempt.</p> <p>Vent Gas Stream Control = Vent gas stream is controlled by a flare.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
X-901-VNT	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene in which more than 1.1 pounds of ethylene per 1,000 pounds of product are emitted.
X-901-VNT	40 CFR Part 63, Subpart FFFF	63FFFF-01	Emission Standard =
GRPPEUDG1	30 TAC Chapter 115, Degreasing Processes	R5412-01	30 TAC CHAPTER 115 (REG V) SOLVENT DEGREASING MACHINE TYPE = COLD SOLVENT CLEANING MACHINE ALTERNATE CONTROL REQUIREMENT (ACR) [REG V] = EXECUTIVE DIRECTOR HAS NOT APPROVED AN ALTERNATE CONTROL REQUIREMENT AS ALLOWED UNDER 30 TAC 115.413. SOLVENT SPRAYED [REG V] = SOLVENT IS SPRAYED SOLVENT VAPOR PRESSURE [REG V] = LESS THAN OR EQUAL TO 0.6 PSIA AS MEASURED AT 100 DEGREES FAHRENHEIT [SOLVENT DEGREASING MACHINE TYPE = 'COLD' OR 'RRC-S'] SOLVENT HEATED = SOLVENT NOT HEATED TO A TEMPERATURE GREATER THAN 120 DEGREES FAHRENHEIT PARTS LARGER THAN DRAINAGE [REG V] = SOME CLEANED PART FOR WHICH MACHINE IS AUTHORIZED IS NOT LARGER THAN INTERNAL DRAINAGE FACILITY OF MACHINE. DRAINAGE AREA [REG V] = AREA GREATER THAN OR EQUAL TO 16 SQUARE INCHES DISPOSAL IN ENCLOSED CONTAINERS [REG V] = WASTE SOLVENT PROPERLY DISPOSED OF IN ENCLOSED CONTAINERS
GRPPEUDG2	30 TAC Chapter 115, Degreasing Processes	R5412-01	30 TAC CHAPTER 115 (REG V) SOLVENT DEGREASING MACHINE TYPE = COLD SOLVENT CLEANING MACHINE ALTERNATE CONTROL REQUIREMENT (ACR) [REG V] = EXECUTIVE DIRECTOR HAS NOT APPROVED AN ALTERNATE CONTROL REQUIREMENT AS ALLOWED UNDER 30 TAC 115.413. SOLVENT SPRAYED [REG V] = SOLVENT IS NOT SPRAYED SOLVENT VAPOR PRESSURE [REG V] = LESS THAN OR EQUAL TO 0.6 PSIA AS MEASURED AT 100 DEGREES FAHRENHEIT [SOLVENT DEGREASING MACHINE TYPE = 'COLD' OR 'RRC-S'] SOLVENT HEATED = SOLVENT HEATED TO A TEMPERATURE GREATER THAN 120 DEGREES FAHRENHEIT PARTS LARGER THAN DRAINAGE [REG V] = SOME CLEANED PART FOR WHICH MACHINE IS AUTHORIZED IS NOT LARGER THAN INTERNAL DRAINAGE FACILITY OF MACHINE. DRAINAGE AREA [REG V] = AREA GREATER THAN OR EQUAL TO 16 SQUARE INCHES DISPOSAL IN ENCLOSED CONTAINERS [REG V] = WASTE SOLVENT PROPERLY DISPOSED OF IN ENCLOSED CONTAINERS
H-3030	30 TAC Chapter 117, Subchapter B	7303A	MAXIMUM RATED CAPACITY = MRC is less than 40 MMBtu/hr

* - The "unit attributes" or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 2462C	Issuance Date: 01/20/2009
Authorization No.: 2462C	Issuance Date: 07/17/2013
Authorization No.: 83791	Issuance Date: 12/06/2012
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 03/14/1997
Number: 106.261	Version No./Date: 12/24/1998
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 03/14/1997
Number: 106.262	Version No./Date: 12/24/1998
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.393	Version No./Date: 03/14/1997
Number: 106.393	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 07/08/1998
Number: 106.454	Version No./Date: 09/09/1998
Number: 106.454	Version No./Date: 09/23/1999
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 03/14/1997

Number: 106.472	Version No./Date: 11/26/1997
Number: 106.472	Version No./Date: 09/23/1999
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 03/14/1997
Number: 106.476	Version No./Date: 03/14/1997
Number: 106.476	Version No./Date: 09/23/1999
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 03/14/1997
Number: 106.478	Version No./Date: 09/23/1999
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 03/14/1997
Number: 106.532	Version No./Date: 09/09/1998
Number: 106.532	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sandblasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table”, or “MAERT” for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit’s compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: GRP1792VNT-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions are observed. Opacity shall not exceed 30% averaged over a six-minute period	
<p>Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA’s “Compliance Assurance Monitoring (CAM) Technical Guidance Document” (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA’s Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to “EPA Reference Method 22” procedures.</p>	

Unit/Group/Process Information	
ID No.: GRP1792VNT-2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-02
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions are observed. Opacity shall not exceed 20% averaged over a six-minute period.	
<p>Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: GRPPEUDG1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-01
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: monthly	
Averaging Period: n/a	
Deviation Limit: Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 115.412(1)(A)-(F)	
<p>Basis of monitoring: The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its design.</p>	

Unit/Group/Process Information	
ID No.: GRPPEUDG2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-01
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: monthly	
Averaging Period: n/a	
Deviation Limit: Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 115.412(1)(A)-(F)	
<p>Basis of monitoring: The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its design.</p>	

Unit/Group/Process Information	
ID No.: P-930	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-02
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions are observed. Opacity shall not exceed 20% averaged over a six-minute period	
<p>Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: TK-405	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-01
Pollutant: VOC	Main Standard: § 115.112(a)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Not keeping record of tank construction specifications	
<p>Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.</p>	

Unit/Group/Process Information	
ID No.: TK-405	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-01
Pollutant: VOC	Main Standard: § 115.112(a)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: Repairs not completed to fill pipe if structural integrity of the fill pipe is in question during inspection when the tank has been emptied and degassed.	
<p>Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.</p>	

Unit/Group/Process Information	
ID No.: U905	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-02
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions are observed. Opacity shall not exceed 20% averaged over a six-minute period	
<p>Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semicheical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes

OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes