

Statement of Basis of the Federal Operating Permit

E. I. du Pont de Nemours and Company

Site Name: Sabine River Works
Area Name: Ethylene Unit
Physical Location: 3055 FM 1006
Nearest City: Orange
County: Orange

Permit Number: O2074
Project Type: Renewal

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 permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

- A description of the facility/area process description;
- 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: December 1, 2015

Operating Permit Basis of Determination

Permit Area Process Description

DuPont Sabine River Works Ethylene Unit receives Ethane/Propane feed stock from offsite via pipeline. The material is cracked in ten heaters, and the hot process gases are cooled in a water quench system. After quenching, the charge gases, along with ethylene purges from onsite polyethylene facilities and refinery grade propylene from offsite sources, are fed through a series of treatment and compression steps in order to dry, minimize impurities, and liquefy. The liquid hydrocarbons are then separated by distillation into Ethylene, Hydrogen, Fuel Gas, Ethane, Propylene, Propane, C4's, Light Aromatic Distillate, and Heavy Aromatic Distillate. In addition, process water is collected at various points within the unit and processed in order to recover additional hydrocarbons. Products are distributed by various mechanisms including pipeline, rail car, and barges for uses in the Ethylene Unit, in other Units, and offsite.

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: O1895, O1896, O1899, O1900, O1901, O2001, O2055, O2331

Major Source Pollutants

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

Major Pollutants	VOC, NOX, HAPS, CO, GHG
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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 not addressed in the Special Terms and Conditions

All 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	Yes
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*	Changes and Exceptions to DSS**
GRP-SSTRTK	40 CFR Part 61, Subpart FF	61FF-PK-SSTRTKA	<p>Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device.</p> <p>Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.</p> <p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.</p> <p>Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.</p> <p>Control Device Type/Operations = Flare</p> <p>Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).</p> <p>Closed Vent System and Control Device AMOC = Not using an alternate means of compliance</p> <p>Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.</p>	
GRP-SSTRTK	40 CFR Part 61, Subpart FF	61FF-PK-SSTRTKB	<p>Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device.</p> <p>Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.</p> <p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.</p> <p>Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.</p> <p>Control Device Type/Operations = Carbon adsorption system that does not regenerate the carbon bed directly in the control device</p> <p>Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).</p> <p>Closed Vent System and Control Device AMOC = Not using an alternate means of compliance</p> <p>Engineering Calculations = Results of performance tests are used to demonstrate that the control device achieves emission limitation.</p> <p>Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.</p> <p>Carbon Replacement Interval = The carbon in the carbon adsorption system is replaced when monitoring indicates breakthrough.</p>	
GRP-SSTRTK	40 CFR Part 63, Subpart YY	63YY-SSTRTKA	<p>Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103.</p>	
GRP-SSTRTK	40 CFR Part 63, Subpart YY	63YY-SSTRTKB	<p>Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PK-23	30 TAC Chapter 115, Storage of VOCs	R5112-PK-23	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	
PK-23	40 CFR Part 63, Subpart EEEE	63EEEE-PK-23	Product Stored = Organic HAP containing liquid other than crude oil.	
PK-27	30 TAC Chapter 115, Storage of VOCs	R5112-PK-27	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 and vapor recovery system 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 Control Device Type = Flare	
PK-27	40 CFR Part 63, Subpart YY	63YY-PK-27	Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103.	
PK-51	30 TAC Chapter 115, Storage of VOCs	R5112-PK-51	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	
PK-60	40 CFR Part 60, Subpart Kb	60Kb-PK-60	Product Stored = Volatile organic liquid 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*	Changes and Exceptions to DSS**
PK-60	40 CFR Part 61, Subpart FF	61FF-PK-60	<p>Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device.</p> <p>Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.</p> <p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.</p> <p>Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.</p> <p>Closed Vent System and Control Device = A closed vent system and control device is used.</p> <p>Control Device Type/Operations = Carbon adsorption system that does not regenerate the carbon bed directly in the control device</p> <p>Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).</p> <p>Closed Vent System and Control Device AMOC = Not using an alternate means of compliance</p> <p>Engineering Calculations = Results of performance tests are used to demonstrate that the control device achieves emission limitation.</p> <p>Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.</p> <p>Carbon Replacement Interval = The carbon in the carbon adsorption system is replaced when monitoring indicates breakthrough.</p>	
PK-60	40 CFR Part 63, Subpart YY	63YY-PK-60	Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103.	
PKA-8A	30 TAC Chapter 115, Storage of VOCs	R5112-PKA-8A	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using an internal floating roof (IFR)</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>	
PKA-8A	40 CFR Part 63, Subpart YY	63YY-PKA-8A	Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103.	
PKA-8B	30 TAC Chapter 115, Storage of VOCs	R5112-PKA-8B	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using an internal floating roof (IFR)</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>	
PKA-8B	40 CFR Part 63, Subpart YY	63YY-PKA-8B	Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PK-FA1103	40 CFR Part 63, Subpart YY	63YY-PK-FA1103A	<p>Source Type = Tank is at an ethylene production facility.</p> <p>Existing Source = Polycarbonate unit is located at an existing source.</p> <p>Process Wastewater = Tank manages a Group 1 wastewater stream subject to § 63.1106(a).</p> <p>Subject to §63.1106(c)(3) = Tank is controlled at least as strigently as Table 35 of 40 CFR Part 63, Subpart G.</p>	
PK-FA1103	40 CFR Part 63, Subpart YY	63YY-PK-FA1103B	<p>Source Type = Tank is at an ethylene production facility.</p> <p>Existing Source = Polycarbonate unit is located at an existing source.</p> <p>Process Wastewater = Tank manages a Group 1 wastewater stream subject to § 63.1106(a).</p> <p>Subject to §63.1106(c)(3) = Tank is controlled at least as strigently as Table 35 of 40 CFR Part 63, Subpart G.</p>	
PK-FA452A	40 CFR Part 61, Subpart FF	61FF-PK-FA452A	<p>Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device.</p> <p>Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.</p> <p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.</p> <p>Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.</p> <p>Closed Vent System and Control Device = A closed vent system and control device is used.</p> <p>Control Device Type/Operations = Flare</p> <p>Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).</p> <p>Closed Vent System and Control Device AMOC = Not using an alternate means of compliance</p> <p>Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.</p>	
PK-FA452A	40 CFR Part 63, Subpart YY	63YY-PK-FA452A	<p>Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103.</p>	
PKA-12	30 TAC Chapter 115, Loading and Unloading of VOC	R5211BAL-PKA-12	<p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = Using the 90% overall control option specified in 30 TAC § 115.213(b).</p> <p>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Loading and unloading.</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 11.0 psia.</p> <p>Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.</p> <p>Control Options = Vapor balance system.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PKA-12	30 TAC Chapter 115, Loading and Unloading of VOC	R5211FLR-PKA-12	<p>Chapter 115 Control Device Type = Vapor control system with a flare.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = Using the 90% overall control option specified in 30 TAC § 115.213(b).</p> <p>Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Loading and unloading.</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 11.0 psia.</p> <p>Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.</p> <p>Control Options = Vapor control system that maintains a control efficiency of at least 90%.</p>	
GRP-CHTR	30 TAC Chapter 117, Subchapter B	R7ICI-GRP-CHTR	<p>Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.</p> <p>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).</p> <p>Unit Type = Process heater</p> <p>30 TAC Chapter 116 Limit = NO_x emission limit in 30 TAC § 117.105 is greater than the NO_x emission limit in a 30 TAC Chapter 116 permit</p> <p>CO Emission Limitation = Title 30 TAC § 117.110(e)(1)</p> <p>Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr.</p> <p>CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>NO_x Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average</p> <p>RACT Date Placed in Service = On or before November 15, 1992</p> <p>NO_x Reduction = No NO_x control method</p> <p>Common Stack Combined = Unit is not vented through a common stack, or the total rated heat input from combined units is at less than 250 MMBtu/hr or the annual combined heat input is less than 2.2(10¹¹) Btu/yr.</p> <p>Fuel Type #1 = Gaseous fuel other than natural gas, landfill gas, or renewable non-fossil fuel gases.</p> <p>Fuel Type #2 = Natural gas</p> <p>NO_x Monitoring System = Continuous emissions monitoring system</p> <p>Annual Heat Input = Annual heat input is greater than 2.2(10¹¹) Btu/yr, based on a rolling 12-month average.</p> <p>NO_x Emission Limitation = Title 30 TAC § 117.110(a)(2)</p>	
PK-14	30 TAC Chapter 117, Subchapter B	R7ICI-PK-14	<p>Unit Type = Process heater</p> <p>Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr.</p> <p>RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1).</p> <p>Functionally Identical Replacement = Unit is not a functionally identical replacement.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PK-19	30 TAC Chapter 117, Subchapter B	R7ICI-PK-19	Unit Type = Process heater Maximum Rated Capacity = MRC is less than 40 MMBtu/hr.	
PK-19	40 CFR Part 63, Subpart DDDDD	63DDDDD-PK-19	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. ANNUAL CAPACITY FACTOR = FEDERALLY ENFORCEABLE ANNUAL CAPACITY FACTOR OF GREATER THAN 10% FUEL TYPE = NATURAL GAS HEAT INPUT CAPACITY = RATED HEAT INPUT CAPACITY OF GREATER THAN 10 MMBTU/HR BUT LESS THAN 100 MMBTU/HR	
PK-8	30 TAC Chapter 117, Subchapter B	R7ICI-PK-8	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 = Process heater 30 TAC Chapter 116 Limit = NO _x emission limit in 30 TAC § 117.105 is greater than the NO _x emission limit in a 30 TAC Chapter 116 permit CO Emission Limitation = Title 30 TAC § 117.110(c)(1) Maximum Rated Capacity = Maximum rated capacity is at least 40 MMBtu/hr, but less than 100 MMBtu/hr. CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS. NO _x Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average RACT Date Placed in Service = On or before November 15, 1992 NO _x Reduction = No NO _x control method Common Stack Combined = Unit is not vented through a common stack, or the total rated heat input from combined units is at less than 250 MMBtu/hr or the annual combined heat input is less than 2.2(10 ¹¹) Btu/yr. Fuel Type #1 = Gaseous fuel other than natural gas, landfill gas, or renewable non-fossil fuel gases. Fuel Type #2 = Natural gas NO _x Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000] Annual Heat Input = Annual heat input is greater than 2.8(10 ¹¹) Btu/yr, based on a rolling 12-month average. NO _x Emission Limitation = Title 30 TAC § 117.110(a)(2)	
PK-8	40 CFR Part 63, Subpart DDDDD	63DDDDD-PK-8	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. ANNUAL CAPACITY FACTOR = FEDERALLY ENFORCEABLE ANNUAL CAPACITY FACTOR OF GREATER THAN 10% FUEL TYPE = GASEOUS FUEL OTHER THAN NATURAL GAS, LANDFILL GAS, BIOGAS OR BLAST FURNACE GAS. FUEL TYPE = NATURAL GAS HEAT INPUT CAPACITY = RATED HEAT INPUT CAPACITY OF GREATER THAN 10 MMBTU/HR BUT LESS THAN 100 MMBTU/HR	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PK-16	30 TAC Chapter 111, Visible Emissions	R1111-PK-16	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.	
PK-16	40 CFR Part 60, Subpart A	60A-PK-16	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). 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).	
PK-16	40 CFR Part 63, Subpart A	63A-PK-16	Required Under 40 CFR Part 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).	
PKF-F13	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352ALL	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.	
PKF-F33	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352ALL	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.	
PKF-F33	40 CFR Part 63, Subpart YY	63UU-PKF-F33	Source Type = Ethylene Production. Equipment Type = The fugitive unit contains equipment, as defined in § 63.1101, contactin hazardous air pollutants in Tables 1 through 7 or Table 9, as appropriate.	
PK-38	40 CFR Part 63, Subpart Q	63Q-PK-38	Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.	
GRP-DGF	40 CFR Part 61, Subpart FF	61FF-GRP-DGF	Alternate Means of Compliance = NO By-Pass Line = THE CLOSED VENT SYSTEM HAS A BY-PASS LINE THAT COULD DIVERT THE STREAM AWAY FROM THE CONTROL DEVICE By-Pass Line Valve = A CAR-SEAL OR LOCK AND KEY CONFIGURATION IS USED TO SECURE THE BY-PASS LINE VALVE IN THE CLOSED POSITION Alternative Standards for Oil-Water Separator = NO Control Device Type/Operation = FLARE Engineering Calculations = ENGINEERING CALCULATIONS ARE USED TO DEMONSTRATE CONTROL DEVICE PERFORMANCE Cover and Closed Vent = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC)	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRP-DGF	40 CFR Part 63, Subpart YY	63YY-GRP-DGF	<p>Facility Type = ETHYLENE PRODUCTION FACILITY</p> <p>Process Wastewater = OIL-WATER SEPARATOR RECEIVES, MANAGES OR TREATS A PROCESS WASTEWATER STREAM AS DEFINED IN 40 CFR § 63.1101</p> <p>Meets 40 CFR § 63.149(d) = OIL-WATER SEPARATOR MEETS THE CRITERIA OF 40 CFR § 63.1106(C)(3) OR (C)(4)(I)</p>	
PK-FD2401	40 CFR Part 61, Subpart FF	61FF-PKFD2401	<p>Alternate Means of Compliance = NO</p> <p>By-Pass Line = THE CLOSED VENT SYSTEM HAS A BY-PASS LINE THAT COULD DIVERT THE STREAM AWAY FROM THE CONTROL DEVICE</p> <p>By-Pass Line Valve = A CAR-SEAL OR LOCK AND KEY CONFIGURATION IS USED TO SECURE THE BY-PASS LINE VALVE IN THE CLOSED POSITION</p> <p>Alternative Standards for Oil-Water Separator = NO</p> <p>Control Device Type/Operation = BOILER OR PROCESS HEATER, DESIGN HEAT INPUT <44MW, ACHIEVING TOC CONCENTRATION OF 20 PPMV</p> <p>Engineering Calculations = PERFORMANCE TEST IS BEING USED TO DETERMINE COMPLIANCE OF A CONTROL DEVICE</p> <p>Alternate Monitoring Parameters = ALTERNATE MONITORING PARAMETERS HAVE BEEN APPROVED BY THE ADMINISTRATOR</p> <p>Fuel Gas System = EMISSIONS ARE ROUTED TO A CONTROL DEVICE</p> <p>Cover and Closed Vent = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC)</p> <p>Close Vent System and Control Device AMOC = COMPLYING WITH THE REQUIREMENTS OF § 61.349</p>	
PK-FD2401	40 CFR Part 63, Subpart YY	63YY-PK-FD2401	<p>Facility Type = ETHYLENE PRODUCTION FACILITY</p> <p>Process Wastewater = OIL-WATER SEPARATOR RECEIVES, MANAGES OR TREATS A PROCESS WASTEWATER STREAM AS DEFINED IN 40 CFR § 63.1101</p> <p>Meets 40 CFR § 63.149(d) = OIL-WATER SEPARATOR MEETS THE CRITERIA OF 40 CFR § 63.1106(C)(3) OR (C)(4)(I)</p>	
GRP-CHTR	30 TAC Chapter 111, Visible Emissions	R1111-GRP-CHTR	<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 at least 100,000 actual cubic feet per minute.</p>	
GRP-SSTR	30 TAC Chapter 115, Vent Gas Controls	R5120-GRPSSTRA	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRP-SSTR	30 TAC Chapter 115, Vent Gas Controls	R5120-GRPSSTRB	Alternate Control Requirement = Alternate control is not used. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.	
GRP-SSTR	40 CFR Part 63, Subpart YY	63YY-GRP-SSTRA	Source Type = Ethylene production	
GRP-SSTR	40 CFR Part 63, Subpart YY	63YY-GRP-SSTRB	Source Type = Ethylene production	
GRP-SSTR	40 CFR Part 65, Subpart D	65CAR-GRP-SSTRA	VENT TYPE = combination of two or more distillation units and the common recovery system into which their vent streams are discharged. CONTROL DEVICE TYPE = Smokeless Flare	Applicable requirements were determined through rule review and analysis of unit attributes.
GRP-SSTR	40 CFR Part 65, Subpart D	65CAR-GRP-SSTRB	VENT TYPE = combination of two or more distillation units and the common recovery system into which their vent streams are discharged. CONTROL DEVICE TYPE = Carbon Adsorption System that does not regenerate the carbon bed directly in the control device	Applicable requirements were determined through rule review and analysis of unit attributes.
PK-14	30 TAC Chapter 111, Visible Emissions	R1111-PK-14	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. 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. 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). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.	
PK-DA2403	40 CFR Part 60, Subpart NNN	60NNN-PK-DA2403	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Construction/Modification Date = After December 30, 1983. Vent Type = Vent is not regulated by Subpart NNN. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate less than 0.008 scm/min.	
PK-DA400	40 CFR Part 60, Subpart NNN	60NNN-PK-DA400	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Construction/Modification Date = After December 30, 1983. Vent Type = Vent is not regulated by Subpart NNN. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate less than 0.008 scm/min.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRP-DGF	30 TAC Chapter 115, Industrial Wastewater	R5142-GRP-DGF	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Flare.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
PK-60	30 TAC Chapter 115, Industrial Wastewater	R5142-PK-60	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Carbon adsorber.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
PK-DRAIN	30 TAC Chapter 115, Industrial Wastewater	R5352-PK-DRAIN	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = A wastewater component that is exempted from the control requirements of 30 TAC § 115.142 because it handles only exempted wastewater streams under 30 TAC § 115.147(2).</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
PK-FA1103	30 TAC Chapter 115, Industrial Wastewater	R5142PK-FA1103A	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Flare.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PK-FA1103	30 TAC Chapter 115, Industrial Wastewater	R5142PK-FA1103B	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Carbon adsorber.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
PK-FA1105	30 TAC Chapter 115, Industrial Wastewater	R5142-PKFA1105A	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Flare.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
PK-FA1105	30 TAC Chapter 115, Industrial Wastewater	R5142-PKFA1105B	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Carbon adsorber.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PK-FB1100	30 TAC Chapter 115, Industrial Wastewater	R5142-PKFB1100A	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Flare.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
PK-FB1100	30 TAC Chapter 115, Industrial Wastewater	R5142-PKFB1100B	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Carbon adsorber.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
PK-FB802	30 TAC Chapter 115, Industrial Wastewater	R5142-PK-FB802A	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Flare.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PK-FB802	30 TAC Chapter 115, Industrial Wastewater	R5142-PK-FB802B	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Carbon adsorber.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
PK-FD2401	30 TAC Chapter 115, Industrial Wastewater	R5142-PK-FD2401	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a biotreatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Enclosed non-catalytic combustion device.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
PK-14	40 CFR Part 60, Subpart RRR	60RRR-PK-14	<p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Construction/Modification Date = After June 29, 1990.</p> <p>Affected Facility Type = Facility is not a reactor subject to 40 CFR Part 60, Subpart RRR and is not specifically exempted.</p>	
PK-8	40 CFR Part 61, Subpart FF	61FF-PK-8-1	<p>Unit Type = Individual drain system</p> <p>CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = Complying with the requirements of § 61.349</p> <p>By-pass Line = System contains by-pass line that could divert stream from the control device.</p> <p>By-pass Line Valve = Car-seal or lock-and-key is used to secure by-pass line valve in the closed position.</p> <p>Control Device Type/Operation = Boiler or process heater having a design heat input capacity less than 44 MW and that achieves a total organic compound concentration of 20 ppmv on a dry basis corrected to 3% oxygen.</p> <p>Engineering Calculations = Engineering calculations show that the control device is proven to achieve its emission limitation.</p> <p>Alternate Monitoring Parameters = Alternate monitoring parameters or requirements have been approved by the Administrator.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRP-SSTRTP	40 CFR Part 61, Subpart FF	61FF-GRP-SSTRA	<p>AMOC = An alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.348 for treatment processes is not used.</p> <p>By-Pass Line = The closed-vent system does not contain a by-pass line that could divert the vent stream away from the control device.</p> <p>Treatment Stream Unit Exempt = There are not units in the wastewater treatment system that are exempt according to 40 CFR § 61.348(b)(2).</p> <p>Complying with § 61.342(e) = The facility is not complying with 40 CFR § 61.342(e).</p> <p>Control Device Type/Operation = Flare.</p> <p>Openings = The treatment process or wastewater treatment system unit has openings.</p> <p>Stream Combination = The process wastewater, product tank drawdown, or landfill leachate is combined with other waste streams for the purpose of facilitating management or treatment in the wastewater treatment system.</p> <p>Engineering Calculations = Performance tests are used show that the control device achieves its emission limitation.</p> <p>Less Than Atmospheric = A cover and closed-vent system are operated such that the treatment process or wastewater system unit is maintained at ambient atmospheric pressure.</p> <p>Closed-Vent System and Control Device = A closed-vent system and control device is used.</p> <p>Process Or Stream Exemption = The treatment process or waste stream is complying with 40 CFR §61.348(d).</p> <p>AMOC = No alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device is used.</p>	
GRP-SSTRTP	40 CFR Part 61, Subpart FF	61FF-GRP-SSTRB	<p>AMOC = An alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.348 for treatment processes is not used.</p> <p>By-Pass Line = The closed-vent system does not contain a by-pass line that could divert the vent stream away from the control device.</p> <p>Treatment Stream Unit Exempt = There are not units in the wastewater treatment system that are exempt according to 40 CFR § 61.348(b)(2).</p> <p>Complying with § 61.342(e) = The facility is not complying with 40 CFR § 61.342(e).</p> <p>Control Device Type/Operation = Carbon adsorption system that does not regenerate the carbon bed directly in the control device.</p> <p>Openings = The treatment process or wastewater treatment system unit has openings.</p> <p>Stream Combination = The process wastewater, product tank drawdown, or landfill leachate is combined with other waste streams for the purpose of facilitating management or treatment in the wastewater treatment system.</p> <p>Engineering Calculations = Engineering calculations show that the control device is proven to achieve its emission limitation.</p> <p>Less Than Atmospheric = A cover and closed-vent system are operated such that the treatment process or wastewater system unit is maintained at ambient atmospheric pressure.</p> <p>Closed-Vent System and Control Device = A closed-vent system and control device is used.</p> <p>Process Or Stream Exemption = The treatment process or waste stream is complying with 40 CFR §61.348(d).</p> <p>AMOC = No alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device is used.</p> <p>Carbon Replacement Interval = The carbon in the carbon adsorption system is replaced on indication of breakthrough.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRP-SSTRTP	40 CFR Part 63, Subpart YY	63YY-GRP-SSTRA	Facility Type = ETHYLENE PRODUCTION FACILITY	
GRP-SSTRTP	40 CFR Part 63, Subpart YY	63YY-GRP-SSTRB	Facility Type = ETHYLENE PRODUCTION FACILITY	

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

** - Notes changes made to the automated results from the DSS, and a brief explanation why

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

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.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.: 914	Issuance Date: 08/06/2012
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.355	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.492	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

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;
2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and
3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information	
ID No.: PK-FA1103	
Control Device ID No.: PK-16	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Industrial Wastewater	SOP Index No.: R5142PK-FA1103A
Pollutant: VOC	Main Standard: § 115.142(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: It shall be considered a deviation if there is no pilot flame present.	
Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Unit/Group/Process Information	
ID No.: PK-FA1103	
Control Device ID No.: PK-30	Control Device Type: Carbon Adsorption System (Non-Regenerative)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Industrial Wastewater	SOP Index No.: R5142PK-FA1103B
Pollutant: VOC	Main Standard: § 115.142(1)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: 1/day of operation	
Averaging Period: n/a	
Deviation Limit: Maximum VOC Concentration = 50 ppmv	
<p>Basis of CAM: A common way to monitor a non-regenerative carbon adsorption system is by measuring the outlet VOC concentration with a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. An increase in VOC concentration demonstrates when the carbon canister needs to be replaced. This indicator is consistent with the EPA "CAM Technical Guidance Document" (August 1998) and "Periodic Monitoring Technical Reference Guidance Document" (April 1999). Outlet VOC concentration has been used as an indicator of VOC emissions in many federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; and 30 TAC Chapter 115.</p>	

Unit/Group/Process Information	
ID No.: PK-FA1105	
Control Device ID No.: PK-16	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Industrial Wastewater	SOP Index No.: R5142-PKFA1105A
Pollutant: VOC	Main Standard: § 115.142(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: It shall be considered a deviation if there is no pilot flame present.	
Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Unit/Group/Process Information	
ID No.: PK-FA1105	
Control Device ID No.: PK-75	Control Device Type: Carbon Adsorption System (Non-Regenerative)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Industrial Wastewater	SOP Index No.: R5142-PKFA1105B
Pollutant: VOC	Main Standard: § 115.142(1)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: 1/day of operation	
Averaging Period: n/a	
Deviation Limit: Maximum VOC Concentration = 50 ppmv	
<p>Basis of CAM: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.</p>	

Unit/Group/Process Information	
ID No.: PK-FB1100	
Control Device ID No.: PK-16	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Industrial Wastewater	SOP Index No.: R5142-PKFB1100A
Pollutant: VOC	Main Standard: § 115.142(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: It shall be considered a deviation if there is no pilot flame present.	
Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Unit/Group/Process Information	
ID No.: PK-FB1100	
Control Device ID No.: PK-75	Control Device Type: Carbon Adsorption System (Non-Regenerative)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Industrial Wastewater	SOP Index No.: R5142-PKFB1100B
Pollutant: VOC	Main Standard: § 115.142(1)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: 1/day of operation	
Averaging Period: n/a	
Deviation Limit: Maximum VOC Concentration = 50 ppmv	
<p>Basis of CAM: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.</p>	

Unit/Group/Process Information	
ID No.: PK-FB802	
Control Device ID No.: PK-16	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Industrial Wastewater	SOP Index No.: R5142-PK-FB802A
Pollutant: VOC	Main Standard: § 115.142(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: It shall be considered a deviation if there is no pilot flame present.	
Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Unit/Group/Process Information	
ID No.: PK-FB802	
Control Device ID No.: PK-75	Control Device Type: Carbon Adsorption System (Non-Regenerative)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Industrial Wastewater	SOP Index No.: R5142-PK-FB802B
Pollutant: VOC	Main Standard: § 115.142(1)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: 1/day of operation	
Averaging Period: n/a	
Deviation Limit: Maximum VOC Concentration = 50 ppmv	
<p>Basis of CAM: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.</p>	

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.: GRP-CHTR	
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-GRP-CHTR
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once quarterly	
Averaging Period: Six minute	
Deviation Limit: Opacity greater than 15%	
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.	

Unit/Group/Process Information	
ID No.: GRP-SSTR	
Control Device ID No.: PK-30	Control Device Type: Carbon Adsorption System (Non-Regenerative)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5120-GRPSSTRB
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: 1/day of operation	
Averaging Period: N/A	
Deviation Limit: Maximum VOC Concentration = 50 ppmv	
<p>Basis of monitoring: A common way to monitor a non-regenerative carbon adsorption system is by measuring the outlet VOC concentration with a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. An increase in VOC concentration demonstrates when the carbon canister needs to be replaced. This indicator is consistent with the EPA "CAM Technical Guidance Document" (August 1998) and "Periodic Monitoring Technical Reference Guidance Document" (April 1999). Outlet VOC concentration has been used as an indicator of VOC emissions in many federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; and 30 TAC Chapter 115.</p>	

Unit/Group/Process Information	
ID No.: PK-14	
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-PK-14
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once quarterly	
Averaging Period: Six minute	
Deviation Limit: Opacity greater than 15%	
<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.: PK-23	
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-PK-23
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: The structural integrity of the fill pipe is in question and the tank is filled prior to repair.	
<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.: PK-23	
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-PK-23
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: Records of the tanks construction specifications are not maintained at the site.	
<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.: PK-51	
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-PK-51
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: The structural integrity of the fill pipe is in question and the tank is filled prior to repair.	
<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.: PK-51	
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-PK-51
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: Records of the tank construction specifications are not maintained at the site.	
<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>	

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on June 22, 2015.

Site rating: 10.21 / Satisfactory Company rating: 4.91 / Satisfactory

(High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)

2. Has the permit changed on the basis of the compliance history or site/company rating?No

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS?No

2. Is a compliance plan and schedule included in the permit?.....No

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 Semichemical 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