Statement of Basis of the Federal Operating Permit

ET Gathering & Processing LLC

Site Name: Bear Gas Processing Plant
Physical Location: From Orla go 3 miles southeast on Hwy 285 south, turn right on CR 437, go 1.6 miles to site on left
Nearest City: Orla
County: Reeves

Permit Number: O4446
Project Type: Minor Revision

The North American Industry Classification System (NAICS) Code: 211130
NAICS Name: Natural Gas Extraction

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

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

Prepared on: April 24, 2026

Operating Permit
Basis of Determination

Description of Revisions

- Incorporation of revised issuance date of NSR Standard Permit 169564 and addition of registered PBR 181086 (PBR 106.359).
- Addition of an Alternative Method of Compliance (AMOC) for GRP-FUG to change their fugitive monitoring methods under NSPS OOOOb requirements. The TCEQ approved AMOC document was attached towards the end of the revised permit.
- Addition of multiple new units with applicable requirements.
- Addition of Compliance Assurance Monitoring (CAM) requirements for new units DEHY2, GRP-ENG2 and PRO-AMINE 2. These additions were considered minor, since existing monitoring conditions remain in the permit for similar units DEHY, GRP-ENG and PRO-AMINE.
- Removal of existing CAM requirements for GRP-ENG where CO monitoring was used as a surrogate for CH_2O pollutant. CAM is no longer required since the pre-control PTE for CH_2O emission is now below 10 tpy due the revised standard permit CO maximum emission rate emission limit.

Permit Area Process Description

The following paragraphs describe emission sources and processes at this site.
The natural gas will enter the Bear GP through slug catchers and inlet filters where entrained liquids will be separated from the inlet gas. The liquids along with field condensate that is trucked into the Bear GP will be processed in a condensate stabilization system which will produce Y-Grade NGL product and stabilized condensate. Heat for the stabilization system will be provided by a natural gas-fueled heater (Facility Identification Number [FIN] STABHTR). The stabilized condensate, which can have a Reid Vapor Pressure (RVP) ranging from two (2) to nine (9) pounds per square inch (psi) as the market dictates, will be pumped into four (4) 500-barrel (bbl) atmospheric storage tanks (FINs TK2 through TK5) and loaded out by trucks (FIN LOAD2) as necessary. The storage tank vapors will be captured by a vapor recovery unit (VRU) and routed to the process flare (FIN FLARE1). Truck loading emissions will be combusted by a truck flare (FIN FLARE3). Y-Grade NGL product will be stored in pressurized tanks and exit the Bear GP via pipeline.

Overhead flash gas from the stabilization system will be captured by an overhead compressor, compressed, and recycled back to inlet suction. The overhead compressor will operate at all times during normal operations. In the event that a compressor is shut down for maintenance, the vapors that cannot be captured will be sent to the process flare (FIN: FLARE1) for combustion. All MSS related emissions at the Bear GP are authorized under PBR at 30 TAC §106.359.

The inlet gas stream will be routed to the amine sweetening unit (FIN: AMINE) for removal of carbon dioxide (CO2) and hydrogen sulfide (H2S). CO2 and H2S will be removed from the natural gas in a two-step amine process. Gas will enter the bottom of the amine contactors where it will encounter lean amine solution in counter-current flow. CO2 and H2S contained in the natural gas will be absorbed in the amine. Sweetened natural gas will exit the top of the amine contactors and flow to the Bear GP's dehydration systems. Rich amine containing absorbed CO2 and H2S will flow to the amine flash tank where entrained natural gas vapors will be separated from the rich amine. The flash gas will be routed primarily to the process flare (FIN: FLARE1). Alternatively, flash vapors can be routed to a heater fuel system to be used as fuel for the heaters. Rich amine will then enter the amine regenerator still where it will be heated to drive off CO2 and H2S. Lean amine will be pumped from the bottom of the still to the amine contactors to repeat the process.
CO2 and H2S-rich vapor will exit the top of the regenerator still, be cooled in aerial coolers, and then flow into a still reflux accumulator where condensed liquids and acid gas will be separated. The condensed liquids will be pumped back to the amine still as reflux. The acid gas vapor will be routed to a thermal oxidizer (FIN: TO) where the H2S, volatile organic compounds (VOC), and other hydrocarbons will be incinerated. The acid gas may be routed to the acid gas flare (FIN: FLARE2) during thermal oxidizer downtime.

Dehydration will be accomplished using a TEG unit (FIN: DEHY) and a mol sieve unit. Sweet natural gas from the amine contactors will enter the bottom of the glycol contactor where it will encounter TEG in counter-current flow. The TEG will absorb water from the natural gas. Dry natural gas will exit the top of the glycol contactor and be routed to the mol sieve unit where hot regeneration gas flows through the mole sieve bed to vaporize the adsorbed water and is then cooled and free water removed before being recycled for dehydration. The heat for regeneration of the mol sieve beds will be supplied by a regenerator heater (FIN: REGEN-HTR). The mole sieve unit is a closed system; therefore, there are no emissions associated with this process. Rich TEG (water-saturated) leaving the glycol contactor will be sent to a flash

tank where entrained vapors will be separated from the rich TEG. The flash gas will be routed primarily to the process flare (FIN: FLARE1).
Alternatively, flash vapors can be routed to a heater fuel system to be used as fuel for the heaters. Rich glycol will leave the flash tank and enter the glycol regenerator still. Absorbed water and hydrocarbons will be driven off by heat from the glycol reboiler (FIN: TEGREB). Lean glycol will be recirculated to the glycol contactor. The still overhead vapor will pass through a BTEX condenser to remove water and heavy hydrocarbons. Any non-condensable vapors will be routed to the thermal oxidizer (FIN: TO) for combustion or may be routed to the acid gas flare (FIN: FLARE2) during thermal oxidizer downtime.
Condensed water and hydrocarbons will be sent to a 500-bbl atmospheric slop oil/water storage tank (FIN: TK1) as well as liquids from various plant drains and sumps and loaded out by truck (FIN: LOAD1) as necessary.

After dehydration, sweet, dry natural gas will be routed to the cryogenic process for recovery of NGL. Liquids will be removed by chilling the natural gas while reducing the stream pressure to the point where the NGL condenses out from the gas stream. This will be accomplished using electric motor-driven compressors and turboexpanders and propane refrigeration. The resulting NGL will be treated in amine liquid contactors, prior to being discharged from the Bear GP via pipeline. Rich amine from the NGL amine contactors will be regenerated with the rich amine from the natural gas amine contactors in the amine regenerator still.

Residue gas leaving the cryogenic unit will be compressed by four (4) dual-drive engine-driven recompressors (FINs: C-1 through C-4) prior to being sent out through the residue pipeline. Dual-drive recompressors are driven by a combination of natural gas-fired engines and electric motors.

The Bear GP may generate fugitive emissions (FIN: FUG) from equipment components such as piping fittings, pumps, and compressor seals. Energy Transfer has a Leak Detection and Repair (LDAR) program to minimize emissions from leaks at the Bear GP.

Heat for the amine treating system and cryogenic plant will be provided by a hot oil system and natural gas-fueled heaters (FINs: HMO-HTR and HMO-HTR2). The Bear GP will also be equipped with various fixed roof tanks (FIN: TKMISC) storing lube oil, antifreeze, methanol, glycol, and amine to support the operations on site.

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: None

Major Source Pollutants

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

Major Pollutants	VOC, SO2, NOX, HAPS, CO

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 an 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 is based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

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

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

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

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

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

Appendix A

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

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

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

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

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

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

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)	No
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
CSAPR (Cross-State Air Pollution Rule)	No
Federal Implementation Plan for Regional Haze (Texas SO_2 Trading Program)	No

Insignificant Activities and Emission Units

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:

De Minimis Sources

1. Sources identified in the “De Minimis Facilities or Sources” list maintained by TCEQ. The list is available at https://www.tceq.texas.gov/permitting/air/newsourcereview/de_minimis.html.

Miscellaneous Sources

2. Office activities such as photocopying, blueprint copying, and photographic processes.
3. Outdoor barbecue pits, campfires, and fireplaces.
4. Storage and handling of sealed portable containers, cylinders, or sealed drums.
5. Vehicle exhaust from maintenance or repair shops.
6. 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).
7. 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.

8. 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.
9. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
10. Well cellars.
11. 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.
12. Equipment used exclusively for the melting or application of wax.
13. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
14. Battery recharging areas.

Sources Authorized by 30 TAC Chapter 106, Permits by Rule

15. Sources authorized by §106.102: Combustion units designed and used exclusively for comfort heating purposes employing liquid petroleum gas, natural gas, solid wood, or distillate fuel oil.
16. Sources authorized by §106.122: 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.
17. Sources authorized by §106.141: Batch mixers with rated capacity of 27 cubic feet or less for mixing cement, sand, aggregate, lime, gypsum, additives, and/or water to produce concrete, grout, stucco, mortar, or other similar products.
18. Sources authorized by §106.143: Wet sand and gravel production facilities that obtain material from subterranean and subaqueous beds where the deposits of sand and gravel are consolidated granular materials resulting from natural disintegration of rock and stone and have a production rate of 500 tons per hour or less.
19. Sources authorized by §106.148: Railcar or truck unloading of wet sand, gravel, aggregate, coal, lignite, and scrap iron or scrap steel (but not including metal ores, metal oxides, battery parts, or fine dry materials) into trucks or other railcars for transportation to other locations.
20. Sources authorized by §106.149: Sand and gravel production facilities that obtain material from deposits of sand and gravel consisting of natural disintegration of rock and stone, provided that crushing or breaking operations are not used and no blasting is conducted to obtain the material.
21. Sources authorized by §106.161: Animal feeding operations which confine animals in numbers specified and any associated on-site feed handling and/or feed millings operations, not including caged laying and caged pullet operations.
22. Sources authorized by §106.162: Livestock auction sales facilities.
23. Sources authorized by §106.163: All animal racing facilities, domestic animal shelters, zoos, and their associated confinement areas, stables, feeding areas, and waste collection and treatment facilities, other than incineration units.
24. Sources authorized by §106.229: Equipment used exclusively for the dyeing or stripping of textiles.
25. Sources authorized by §106.241: Any facility where animals or poultry are slaughtered and prepared for human consumption provided that waste products such as blood, offal, and feathers are stored in such a manner as to prevent the creation of a nuisance condition and these waste products are removed from the premises daily or stored under refrigeration.
26. Sources authorized by §106.242: Equipment used in eating establishments for the purpose of preparing food for human consumption.
27. Sources authorized by §106.243: Smokehouses in which the maximum horizontal inside cross-sectional area does not exceed 100 square feet.
28. Sources authorized by §106.244: Ovens, mixers, blenders, barbecue pits, and cookers if the products are edible and intended for human consumption.
29. Sources authorized by §106.266: Vacuum cleaning systems used exclusively for industrial, commercial, or residential housekeeping purposes.
30. Sources authorized by §106.301: Aqueous fertilizer storage tanks.
31. Sources authorized by §106.313: 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.
32. Sources authorized by §106.316: Equipment used for inspection of metal products.
33. Sources authorized by §106.317: Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
34. Sources authorized by §106.318: Die casting machines.
35. Sources authorized by §106.319: Foundry sand mold forming equipment to which no heat is applied.

36. Sources authorized by §106.331: Equipment used exclusively to package pharmaceuticals and cosmetics or to coat pharmaceutical tablets.
37. Sources authorized by §106.333: Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water-based adhesives.
38. Sources authorized by §106.372: 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.
39. Sources authorized by §106.391: Presses used for the curing of rubber products and plastic products.
40. Sources authorized by §106.394: Equipment used for compression molding and injection molding of plastics.
41. Sources authorized by §106.414: Equipment used exclusively for the packaging of lubricants or greases.
42. Sources authorized by §106.415: Laundry dryers, extractors, and tumblers used for fabrics cleaned with water solutions of bleach or detergents.
43. Sources authorized by §106.431: Equipment used exclusively to mill or grind coatings and molding compounds where all materials charged are in paste form.
44. Sources authorized by §106.432: Containers, reservoirs, or tanks used exclusively for dipping operations for coating objects with oils, waxes, or greases where no organic solvents, diluents, or thinners are used; or dipping operations for applying coatings of natural or synthetic resins which contain no organic solvents.
45. Sources authorized by §106.451: Blast cleaning equipment using a suspension of abrasives in water.
46. Sources authorized by §106.453: Equipment used for washing or drying products fabricated from metal or glass, provided no volatile organic materials are used in the process and no oil or solid fuel is burned.
47. Sources authorized by §106.471: Equipment used exclusively to store or hold dry natural gas.
48. Sources authorized by §106.531: Sewage treatment facilities, excluding combustion or incineration equipment, land farms, or grease trap waste handling or treatment facilities.

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**
EMERGEN-1	40 CFR Part 60, Subpart JJJJ	60JJJJ-01	Construction/Reconstruction/Modification Date = The stationary spark ignition (SI) internal combustion engine (ICE) commenced construction, reconstruction or modification after June 12, 2006. Test Cell = The SI ICE is not being tested at an engine test cell/stand. Exemption = The SI ICE is not exempt. Temp Replacement = The SI ICE is not acting as a temporary replacement. Horsepower = Maximum engine power greater than or equal to 130 HP and less than 500 HP. Fuel = SI ICE that is a lean-burn engine that uses liquefied petroleum gas (LPG). Commencing = SI ICE was newly constructed after 06/12/2006 Manufacture Date = Date of manufacture is on or after January 1, 2011. Certified = Purchased a non-certified SI ICE. Service = SI ICE is an emergency engine.	
EMERGEN-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = The site is a major source of hazardous air pollutants as defined in 40 CFR § 63.2 Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).	
GRP-ENG	40 CFR Part 60, Subpart JJJJ	60JJJJ	Construction/Reconstruction/Modification Date = The stationary spark ignition (SI) internal combustion engine (ICE) commenced construction, reconstruction or modification after June 12, 2006. Test Cell = The SI ICE is not being tested at an engine test cell/stand. Exemption = The SI ICE is not exempt. Temp Replacement = The SI ICE is not acting as a temporary replacement. Horsepower = Maximum engine power greater than or equal to 1350 HP. Fuel = SI ICE that uses natural gas. Commencing = SI ICE was newly constructed after 06/12/2006 Manufacture Date = Date of manufacture is on or after July 1, 2010. Certified = Purchased a non-certified SI ICE. Service = SI ICE is a non-emergency engine.	
GRP-ENG	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = The site is a major source of hazardous air pollutants as defined in 40 CFR § 63.2	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Brake HP = Stationary RICE with a brake HP greater than 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Service Type = Normal use. Stationary RICE Type = 4 stroke spark ignited lean burn engine. Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies. Emission Limitation = Limiting formaldehyde concentration from the stationary RICE exhaust Performance Test = No previous performance test used, a performance test is conducted to demonstrate initial compliance Control Technique = Oxidation catalyst Monitoring System = Continuous parameter monitoring system	
GRP-ENG2	40 CFR Part 60, Subpart JJJJ	60JJJJ	Construction/Reconstruction/Modification Date = The stationary spark ignition (SI) internal combustion engine (ICE) commenced construction, reconstruction or modification after June 12, 2006. Test Cell = The SI ICE is not being tested at an engine test cell/stand. Exemption = The SI ICE is not exempt. Temp Replacement = The SI ICE is not acting as a temporary replacement. Horsepower = Maximum engine power greater than or equal to 1350 HP. Fuel = SI ICE that uses natural gas. Commencing = SI ICE was newly constructed after 06/12/2006 Manufacture Date = Date of manufacture is on or after July 1, 2010. Certified = Purchased a non-certified SI ICE. Service = SI ICE is a non-emergency engine.	
GRP-ENG2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = The site is a major source of hazardous air pollutants as defined in 40 CFR § 63.2 Brake HP = Stationary RICE with a brake HP greater than 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Service Type = Normal use. Stationary RICE Type = 4 stroke spark ignited lean burn engine. Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies. Emission Limitation = Limiting formaldehyde concentration from the stationary RICE exhaust Performance Test = No previous performance test used, a performance test is conducted to demonstrate initial compliance	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Control Technique = Oxidation catalyst Monitoring System = Continuous parameter monitoring system	
GRP-COND	40 CFR Part 60, Subpart Kb	60Kb	Product Stored = Petroleum (other than crude oil) or condensate stored, processed, and/or treated prior to custody transfer Storage Capacity = Capacity is less than or equal to 420,000 gallons (1,589,874 liters)	
GRP-COND	40 CFR Part 60, Subpart OOOO	60OOOO	Construction/Modification Date = After 9/18/2015	
GRP-COND	40 CFR Part 60, Subpart OOOOa	60OOOOa	Construction/Modification Date = After September 18, 2015 Subject to Another Regulation = The storage vessel is not subject to and controlled in accordance with the requirements in 40 CFR part 60, subpart Kb, or 40 CFR part 63, subparts G, CC, HH or WW PTE = Potential for VOC emissions is less than 6 tpy	
GRP-MISC	40 CFR Part 60, Subpart Kb	60Kb	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
GRP-MISC	40 CFR Part 60, Subpart OOOO	60OOOO	Construction/Modification Date = After 9/18/2015	
GRP-MISC	40 CFR Part 60, Subpart OOOOa	60OOOOa	Construction/Modification Date = After September 18, 2015 Subject to Another Regulation = The storage vessel is not subject to and controlled in accordance with the requirements in 40 CFR part 60, subpart Kb, or 40 CFR part 63, subparts G, CC, HH or WW PTE = Potential for VOC emissions is less than 6 tpy	
T-1	40 CFR Part 60, Subpart Kb	60Kb	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is greater than or equal to 19,813 gallons but less than 39,890 gallons (capacity is greater than 75,000 liters but less than or equal to 151,000 liters) WW Tank Control = The storage vessel is not using 40 CFR 63, subpart WW to comply with 40 CFR 60, subpart Kb Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-1	40 CFR Part 60, Subpart OOOOa	60OOOOa	Construction/Modification Date = After September 18, 2015 Subject to Another Regulation = The storage vessel is not subject to and controlled in accordance with the requirements in 40 CFR part 60, subpart Kb, or 40 CFR part 63, subparts G, CC, HH or WW PTE = Potential for VOC emissions is less than 6 tpy	
HMO-HTR	40 CFR Part 63, Subpart DDDDD	63DDDDD-02	Commence = Source is new (commenced construction after June 4, 2010)	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr	
HMO-HTR2	40 CFR Part 63, Subpart DDDDD	63DDDDD-02	Commence = Source is new (commenced construction after June 4, 2010) Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr	
HMO-HTRT2	40 CFR Part 63, Subpart DDDDD	63DDDDD-02	Commence = Source is new (commenced construction after June 4, 2010) Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr	
HMO-HTRT2A	40 CFR Part 63, Subpart DDDDD	63DDDDD-02	Commence = Source is new (commenced construction after June 4, 2010) Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr	
REGEN-HTR	40 CFR Part 63, Subpart DDDDD	63DDDDD-01	Commence = Source is new (commenced construction after June 4, 2010) Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input less than 10 MMBtu/hr but greater than 5 MMBtu/hr	
REGEN-HTR2	40 CFR Part 63, Subpart DDDDD	63DDDDD-01	Commence = Source is new (commenced construction after June 4, 2010) Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input less than 10 MMBtu/hr but greater than 5 MMBtu/hr	
STAB-HTR	40 CFR Part 63, Subpart DDDDD	63DDDDD-02	Commence = Source is new (commenced construction after June 4, 2010) Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr	
HMO-HTR	40 CFR Part 60, Subpart Dc	60Dc-01	Construction/Modification Date = After February 28, 2005. Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). Applicability = Unit is not subject to other 40 CFR Part 60 subparts Heat Input Capacity = Heat input capacity is greater than 10 MMBtu/hr (2.9 MW) but less than 30 MMBtu/hr (8.7 MW). D-Series Fuel Type = Natural gas. ACF Option - SO2 = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF. 30% Coal Duct Burner = The facility does not combust coal in a duct burner as part of a combined cycle system; or more than 30% of the heat is from combustion of coal and less than 70% is from exhaust gases entering the duct burner. PM Monitoring Type = No particulate monitoring because there is no applicable PM emission limit SO2 Inlet Monitoring Type = No SO2 monitoring because there is no applicable SO2 emission limit	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			SO2 Outlet Monitoring Type = No SO2 monitoring because there is no applicable SO2 emission limit Technology Type = No emerging or conventional technology is used to reduce or control SO2 emissions	
HMO-HTR2	40 CFR Part 60, Subpart Dc	60Dc-02	Construction/Modification Date = After February 28, 2005. Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). Applicability = Unit is not subject to other 40 CFR Part 60 subparts Heat Input Capacity = Heat input capacity is greater than or equal to 30 MMBtu/hr (8.7 MW) but less than or equal to 75 MMBtu/hr (22 MW). D-Series Fuel Type = Natural gas. ACF Option - SO2 = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF. 30% Coal Duct Burner = The facility does not combust coal in a duct burner as part of a combined cycle system; or more than 30% of the heat is from combustion of coal and less than 70% is from exhaust gases entering the duct burner. PM Monitoring Type = No particulate monitoring because there is no applicable PM emission limit SO2 Inlet Monitoring Type = No SO2 monitoring because there is no applicable SO2 emission limit SO2 Outlet Monitoring Type = No SO2 monitoring because there is no applicable SO2 emission limit Technology Type = No emerging or conventional technology is used to reduce or control SO2 emissions	
HMO-HTRT2	40 CFR Part 60, Subpart Dc	60Dc-02	Construction/Modification Date = After February 28, 2005. Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). Applicability = Unit is not subject to other 40 CFR Part 60 subparts Heat Input Capacity = Heat input capacity is greater than 10 MMBtu/hr (2.9 MW) but less than 30 MMBtu/hr (8.7 MW). D-Series Fuel Type = Natural gas. ACF Option - SO2 = Coal ACF greater than 55%. ACF Option - PM = Other ACF or no ACF. 30% Coal Duct Burner = The facility does not combust coal in a duct burner as part of a combined cycle system; or more than 30% of the heat is from combustion of coal and less than 70% is from exhaust gases entering the duct burner. PM Monitoring Type = No particulate monitoring because there is no applicable PM emission limit SO2 Inlet Monitoring Type = No SO2 monitoring because there is no applicable SO2 emission limit	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			SO2 Outlet Monitoring Type = No SO2 monitoring because there is no applicable SO2 emission limit Technology Type = No emerging or conventional technology is used to reduce or control SO2 emissions	
HMO-HTRT2A	40 CFR Part 60, Subpart Dc	60Dc-02	Construction/Modification Date = After February 28, 2005. Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). Applicability = Unit is not subject to other 40 CFR Part 60 subparts Heat Input Capacity = Heat input capacity is greater than or equal to 30 MMBtu/hr (8.7 MW) but less than or equal to 75 MMBtu/hr (22 MW). D-Series Fuel Type = Natural gas. ACF Option - SO2 = Coal ACF greater than 55%. ACF Option - PM = Other ACF or no ACF. 30% Coal Duct Burner = The facility does not combust coal in a duct burner as part of a combined cycle system; or more than 30% of the heat is from combustion of coal and less than 70% is from exhaust gases entering the duct burner. PM Monitoring Type = No particulate monitoring because there is no applicable PM emission limit SO2 Inlet Monitoring Type = No SO2 monitoring because there is no applicable SO2 emission limit SO2 Outlet Monitoring Type = No SO2 monitoring because there is no applicable SO2 emission limit Technology Type = No emerging or conventional technology is used to reduce or control SO2 emissions	
STAB-HTR	40 CFR Part 60, Subpart Dc	60Dc-01	Construction/Modification Date = After February 28, 2005. Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). Applicability = Unit is not subject to other 40 CFR Part 60 subparts Heat Input Capacity = Heat input capacity is greater than 10 MMBtu/hr (2.9 MW) but less than 30 MMBtu/hr (8.7 MW). D-Series Fuel Type = Natural gas. ACF Option - SO2 = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF. 30% Coal Duct Burner = The facility does not combust coal in a duct burner as part of a combined cycle system; or more than 30% of the heat is from combustion of coal and less than 70% is from exhaust gases entering the duct burner. PM Monitoring Type = No particulate monitoring because there is no applicable PM emission limit SO2 Inlet Monitoring Type = No SO2 monitoring because there is no applicable SO2 emission limit	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			SO2 Outlet Monitoring Type = No SO2 monitoring because there is no applicable SO2 emission limit Technology Type = No emerging or conventional technology is used to reduce or control SO2 emissions	
FLARE1	30 TAC Chapter 111, Visible Emissions	R1111	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.	
FLARE1	40 CFR Part 60, Subpart A	60A	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18.	
FLARE1	40 CFR Part 63, Subpart A	63A	Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63.	
FLARE1T2	30 TAC Chapter 111, Visible Emissions	R1111-01	Acid Gases Only = Flare is used only as an acid gas flare as defined in 30 TAC § 101.1. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.	
FLARE1T2	30 TAC Chapter 111, Visible Emissions	R1111-02	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.	
FLARE2	30 TAC Chapter 111, Visible Emissions	R1111-01	Acid Gases Only = Flare is used only as an acid gas flare as defined in 30 TAC § 101.1. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.	
FLARE2	30 TAC Chapter 111, Visible Emissions	R1111-02	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.	
FLARE3	30 TAC Chapter 111, Visible Emissions	R1111	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.	
FLARE3	40 CFR Part 60, Subpart A	60A	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
FLARE3	40 CFR Part 63, Subpart A	63A	Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63.	
PRO-AMINE	30 TAC Chapter 112, Sulfur Compounds	R200	Sulfur Recovery Plant = The gas sweetening unit is not using sulfur recovery.	
PRO-AMINE	40 CFR Part 60, Subpart LLL	60LLL	Onshore = The sweetening unit is located onshore at a gas processing plant. Construction Date = After August 23, 2011.	
PRO-AMINE	40 CFR Part 60, Subpart OOOO	60OOOO	Construction/Modification Date = After 9/18/2015	
PRO-AMINE	40 CFR Part 60, Subpart OOOOa	60OOOOa-0002	Construction/Modification Date = After September 18, 2015 Onshore = The sweetening unit is located onshore at a gas processing plant Facility Type = Sweetening unit that processes natural gas Design Capacity = Design capacity is less than 2 long tons per day of hydrogen sulfide in the acid gas expressed as sulfur	-- Affected Pollutant - SO_2: Reporting citations § 60.5420a(b), [G] § 60.5420a(b)(1), § 60.5420a(b)(11), [G]§ 60.5420a(b)(13), and [G]§ 60.5420a(b)(14) were removed as the sweetening units with a design capacity less than 2 LT/D of H2S are not subject to emission control requirements and the annual reporting requirements under § 60.5420a(b) are not applicable to these sweetening units.
PRO-AMINE2	40 CFR Part 60, Subpart OOOOb	60OOOOb	Construction/Reconstruction/Modification Date = After December 6, 2022	
GRP-COMP	40 CFR Part 60, Subpart OOOOa	60OOOOa-0001	Construction/Modification Date = After September 18, 2015 Reciprocating Compressor = Reciprocating compressor rod packing being replaced prior to 36 months from the date of the previous replacement or startup AMEL = The reciprocating compressor is not complying with the alternate method of emission limitation in 40 CFR § 60.5398a.	
GRP-COMP2	40 CFR Part 60, Subpart OOOOb	60OOOOb	Construction/Reconstruction/Modification Date = After December 6, 2022 Affected Facility Type = Reciprocating compressor	
GRP-FUG	40 CFR Part 60, Subpart OOOOb	60OOOOb	Construction/Reconstruction/Modification Date = After December 6, 2022 Affected Facility Type = Collection of fugitive emission components at a well site, centralized production facility, or a compressor station	
DEHY	40 CFR Part 63, Subpart HH	63HH-01	Alternate Means of Emission Limitation (AMEL) = The EPA Administrator has not approved an alternate means of emission limitation in accordance with 40 CFR § 63.777 or no alternate has been requested. HAP Source = Stationary source or group of stationary sources of HAPs meeting the definition of a major source as defined in 40 CFR § 63.761. Affected Source Type = Large glycol dehydration unit as defined in 40 CFR § 63.761.	-- Affected Pollutant - 112(B) HAPS: Deleted Monitoring/Testing § 63.773(d)(3)(ii) since M&T §63.773(d)(3) provides various options of compliance and the unit will be complying with M&T citation § 63.773(d)(3)(i)(A) out of those, which is also stated in the CAM requirements.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Process Vent Control = Process vent is connected to a control device or a combination of control devices through a closed-vent system and the outlet benzene emissions from the control device(s) are reduced to a level less than 0.90 megagrams per year. Bypass Device = The closed-vent system does not contain bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device. Sealed Closed Vent System = The closed-vent system contains joints, seams, or other connections that are permanently or semi-permanently sealed. Unsafe to Inspect = No parts of the closed-vent system are designated as unsafe to inspect. Difficult to Inspect = No parts of the closed-vent system are designated as difficult to inspect. Control Device Type = Thermal vapor incinerator. Control Device Operation = Reduces the mass content of either total organic compounds or total hazardous air pollutants in the gases vented to the device by 95.0 weight percent or more. Performance Test/Design Analysis Exemption = No performance test/design analysis exemption is being utilized. Performance Test or Design Analysis = Performance test conducted as specified in 40 CFR § 63.772(e)(3).	
DEHY	40 CFR Part 63, Subpart HH	63HH-02	Alternate Means of Emission Limitation (AMEL) = The EPA Administrator has not approved an alternate means of emission limitation in accordance with 40 CFR § 63.777 or no alternate has been requested. HAP Source = Stationary source or group of stationary sources of HAPs meeting the definition of a major source as defined in 40 CFR § 63.761. Affected Source Type = Large glycol dehydration unit as defined in 40 CFR § 63.761. Process Vent Control = Process vent is connected to a control device or a combination of control devices through a closed-vent system and the outlet benzene emissions from the control device(s) are reduced to a level less than 0.90 megagrams per year. Bypass Device = The closed-vent system does not contain bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device. Sealed Closed Vent System = The closed-vent system contains joints, seams, or other connections that are permanently or semi-permanently sealed. Unsafe to Inspect = No parts of the closed-vent system are designated as unsafe to inspect. Difficult to Inspect = No parts of the closed-vent system are designated as difficult to inspect. Control Device Type = Flare.	
DEHY2	40 CFR Part 63, Subpart HH	63HH-01	Alternate Means of Emission Limitation (AMEL) = The EPA Administrator has not approved an alternate means of emission limitation in accordance with 40 CFR § 63.777 or no alternate has been requested.	-- Affected Pollutant - 112(B) HAPS: Deleted Monitoring/Testing § 63.773(d)(3)(ii) since M&T § 63.773(d)(3) provides various options of compliance and the unit will be complying with M&T

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			HAP Source = Stationary source or group of stationary sources of HAPs meeting the definition of a major source as defined in 40 CFR § 63.761. Affected Source Type = Large glycol dehydration unit as defined in 40 CFR § 63.761. Process Vent Control = Process vent is connected to a control device or a combination of control devices through a closed-vent system and the outlet benzene emissions from the control device(s) are reduced to a level less than 0.90 megagrams per year. Bypass Device = The closed-vent system does not contain bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device. Sealed Closed Vent System = The closed-vent system contains joints, seams, or other connections that are permanently or semi-permanently sealed. Unsafe to Inspect = No parts of the closed-vent system are designated as unsafe to inspect. Difficult to Inspect = No parts of the closed-vent system are designated as difficult to inspect. Control Device Type = Thermal vapor incinerator. Control Device Operation = Reduces the mass content of either total organic compounds or total hazardous air pollutants in the gases vented to the device by 95.0 weight percent or more. Performance Test/Design Analysis Exemption = No performance test/design analysis exemption is being utilized. Performance Test or Design Analysis = Performance test conducted as specified in 40 CFR § 63.772(e)(3).	citation § 63.773(d)(3)(i)(A) out of those, which is also stated in the CAM requirements.
DEHY2	40 CFR Part 63, Subpart HH	63HH-02	Alternate Means of Emission Limitation (AMEL) = The EPA Administrator has not approved an alternate means of emission limitation in accordance with 40 CFR § 63.777 or no alternate has been requested. HAP Source = Stationary source or group of stationary sources of HAPs meeting the definition of a major source as defined in 40 CFR § 63.761. Affected Source Type = Large glycol dehydration unit as defined in 40 CFR § 63.761. Process Vent Control = Process vent is connected to a control device or a combination of control devices through a closed-vent system and the outlet benzene emissions from the control device(s) are reduced to a level less than 0.90 megagrams per year. Bypass Device = The closed-vent system does not contain bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device. Sealed Closed Vent System = The closed-vent system contains joints, seams, or other connections that are permanently or semi-permanently sealed. Unsafe to Inspect = No parts of the closed-vent system are designated as unsafe to inspect. Difficult to Inspect = No parts of the closed-vent system are designated as difficult to inspect. Control Device Type = Flare.	

* - 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 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.	FOPs 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. In addition, many of the permits are accessible online through the link provided below. 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. Permit by Rule (PBR) registrations submitted by permittees are also available online through the link provided below. The following table specifies the PBRs that apply to the site.

The status of air permits, applications, and PBR registrations may be found by performing the appropriate search of the databases located at the following website:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Details on how to search the databases are available in the **Obtaining Permit Documents** section below.

New Source Review Authorization References

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.: 169564	Issuance Date: 03/07/2025
Permits by Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.359	Version No./Date: 09/10/2013
Number: 106.511	Version No./Date: 09/04/2000

Permits by Rule

The TCEQ has interpreted the emission limits prescribed in 30 TAC §106.4(a) as both emission thresholds and default emission limits. The emission limits in 30 TAC §106.4(a) are all considered applicable to each facility as a threshold matter to ensure that the owner/operator qualifies for the PBR authorization. Those same emission limits are also the default emission limits if the specific PBR does not further limit emissions or there is no lower, certified emission limit claimed by the owner/operator.

This interpretation is consistent with how TCEQ has historically determined compliance with the emission limits prior to the addition of the “as applicable” language. The “as applicable” language was added in 2014 as part of changes to the sentence structure in a rulemaking that made other changes to address greenhouse gases and was not intended as a substantive rule change. This interpretation also provides for effective and practical enforcement of 30 TAC §106.4(a), since for the TCEQ to effectively enforce the emission limits in 30 TAC §106.4(a) as emission thresholds, all emission limits must apply. As provided by 30 TAC §106.4(a)(2) and (3), an owner/operator shall not claim a PBR authorization if the facility is subject to major New Source Review. The practical and legal effect of the language in 30 TAC § 106.4 is that if a facility does not emit a pollutant, then the potential to emit for that particular pollutant is zero, and thus, the facility is not authorized to emit the pollutant pursuant to the PBR.

The permit holder is required to keep records for demonstrating compliance with PBRs in accordance with 30 TAC § 106.8 for the following categories:

- As stated in 30 TAC § 106.8(a), the permit holder is not required to keep records for de minimis sources as designated in 30 TAC § 116.119.
- As stated in 30 TAC § 106.8(b) for PBRs on the insignificant activities list, the permit holder is required to provide information that would demonstrate compliance with the general requirements of 30 TAC § 106.4.
- As stated in 30 TAC § 106.8(c) for all other PBRs, the permit holder must maintain sufficient records to demonstrate compliance with the general requirements specified in 30 TAC § 106.4 and to demonstrate compliance with the emission limits and any specific conditions of the PBR as applicable.

The application, or a previously submitted application, contains a PBR Supplemental Table. This table provides supplemental information for all PBR authorizations at the site or application area, including PBRs that are not listed on the OP-REQ1 form. PBRs that are not listed on the OP-REQ1 form authorize emission units that the TCEQ has determined are insignificant sources of emissions (IEUs). PBRs are enforceable through permit condition number 9. The EPA gives States broad discretion in prescribing monitoring, recordkeeping, and reporting for generally applicable requirements that cover insignificant emission units. (see EPA *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*). Federal regulations specifically identify recordkeeping as an appropriate level of monitoring necessary to assure compliance with the requirements applicable to an emissions unit. Permitting authorities

have the best sense of where it is appropriate to conclude that periodic monitoring is not necessary for IEUs, when state program rules already provide sufficient monitoring for these units.

In the case of IEUs in particular, the recordkeeping in 30 TAC §106.8 is sufficient because the units do not have the potential to violate emission limitations or other requirements under normal operating conditions. In particular, where the establishment of a regular program of monitoring would not significantly enhance the ability of the permit to assure compliance with the applicable requirement, the permitting authority can provide that the applicable requirement has monitoring sufficient to yield reliable data that is representative of the emission unit's compliance with the limitations. Therefore, for IEUs compliance with 30 TAC §106.8 is sufficient to meet federal monitoring requirements.

The PBR records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, or parametric monitoring. The PBR records also satisfy the federal operating permit periodic monitoring requirements of 30 TAC § 122.142(c) as they are representative of the emission unit's compliance with 30 TAC Chapter 106.

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 sand-blasting 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.: DEHY	
Control Device ID No.: TO	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: 112(B) HAPS	Main Standard: 169564
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a	
Deviation Limit: Minimum combustion temperature of 1550 deg F	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: DEHY	
Control Device ID No.: FLARE2	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: 112(B) HAPS	Main Standard: 169564
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No pilot flame	
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.: DEHY	
Control Device ID No.: TO	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: VOC	Main Standard: 169564
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a	
Deviation Limit: Minimum combustion temperature of 1550 deg F	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: DEHY	
Control Device ID No.: FLARE2	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: VOC	Main Standard: 169564
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No pilot flame	
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.: DEHY2	
Control Device ID No.: TO2	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: 112(B) HAP	Main Standard: 169564
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a	
Deviation Limit: Minimum combustion temperature of 1550 deg F	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: DEHY2	
Control Device ID No.: FLARE1T2	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: 112(B) HAP	Main Standard: 169564
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No pilot flame	
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.: DEHY2	
Control Device ID No.: TO2	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: VOC	Main Standard: 169564
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a	
Deviation Limit: Minimum combustion temperature of 1550 deg F	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: DEHY2	
Control Device ID No.: FLARE1T2	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: VOC	Main Standard: 169564
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No pilot flame	
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.: GRP-ENG	
Control Device ID No.: OXCAT	Control Device Type: Catalytic converter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: CO	Main Standard: 169564
Monitoring Information	
Indicator: CO Concentration	
Minimum Frequency: Every 15,000 hours of operation	
Averaging Period: N/A	
Deviation Limit: Maximum emission rate of 0.22 g/hp-hr CO	
Basis of CAM: A common way to reduce CO emissions is by the use of a catalytic converter. A catalytic converter uses a catalyst such as platinum and palladium to reduce the CO emissions. When a CO molecule contacts the catalyst, the catalyst assists the reaction of CO with oxygen and allows the formation of CO2 in lieu of CO. Parameters that may be measured to determine control device performance include the outlet CO concentration, the inlet temperature of the catalyst, the pressure drop across the catalyst, and the oxygen concentration in the exhaust gas.	

Unit/Group/Process Information	
ID No.: GRP-ENG	
Control Device ID No.: OX CAT	Control Device Type: Catalytic converter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: CO	Main Standard: 169564
Monitoring Information	
Indicator: Inlet Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a	
Deviation Limit: Minimum Inlet Temperature: 550 deg F. Maximum Inlet Temperature: 1250 deg F.	
Basis of CAM: A common way to reduce CO emissions is by the use of a catalytic converter. A catalytic converter uses a catalyst such as platinum and palladium to reduce the CO emissions. When a CO molecule contacts the catalyst, the catalyst assists the reaction of CO with oxygen and allows the formation of CO2 in lieu of CO. Parameters that may be measured to determine control device performance include the outlet CO concentration, the inlet temperature of the catalyst, the pressure drop across the catalyst, and the oxygen concentration in the exhaust gas.	

Unit/Group/Process Information	
ID No.: GRP-ENG2	
Control Device ID No.: OXCAT	Control Device Type: Catalytic converter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: CO	Main Standard: 169564
Monitoring Information	
Indicator: CO Concentration	
Minimum Frequency: Every 15,000 hours of operation	
Averaging Period: N/A	
Deviation Limit: Maximum emission rate of 0.22 g/hp-hr CO	
Basis of CAM: A common way to reduce CO emissions is by the use of a catalytic converter. A catalytic converter uses a catalyst such as platinum and palladium to reduce the CO emissions. When a CO molecule contacts the catalyst, the catalyst assists the reaction of CO with oxygen and allows the formation of CO2 in lieu of CO. Parameters that may be measured to determine control device performance include the outlet CO concentration, the inlet temperature of the catalyst, the pressure drop across the catalyst, and the oxygen concentration in the exhaust gas.	

Unit/Group/Process Information	
ID No.: GRP-ENG2	
Control Device ID No.: OXCAT	Control Device Type: Catalytic converter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: CO	Main Standard: 169564
Monitoring Information	
Indicator: Inlet Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum Inlet Temperature: 550 deg F. Maximum Inlet Temperature: 1250 deg F.	
Basis of CAM: A common way to reduce CO emissions is by the use of a catalytic converter. A catalytic converter uses a catalyst such as platinum and palladium to reduce the CO emissions. When a CO molecule contacts the catalyst, the catalyst assists the reaction of CO with oxygen and allows the formation of CO2 in lieu of CO. Parameters that may be measured to determine control device performance include the outlet CO concentration, the inlet temperature of the catalyst, the pressure drop across the catalyst, and the oxygen concentration in the exhaust gas.	

Unit/Group/Process Information	
ID No.: PRO-AMINE	
Control Device ID No.: TO	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: 112(B) HAPS	Main Standard: 169564
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a	
Deviation Limit: Minimum combustion temperature of 1550 deg F	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: PRO-AMINE	
Control Device ID No.: FLARE2	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: 112(B) HAPS	Main Standard: 169564
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No pilot flame	
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.: PRO-AMINE2	
Control Device ID No.: TO2	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: 112(B) HAPS	Main Standard: 169564
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a	
Deviation Limit: Minimum combustion temperature of 1550 deg F	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: PRO-AMINE2	
Control Device ID No.: FLARE1T2	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 116, Standard Permits	SOP Index No.: N/A
Pollutant: 112(B) HAPS	Main Standard: 169564
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No pilot flame	
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.	

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.: FLARE1T2	
Control Device ID No.: FLARE1T2	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(4)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per day	
Averaging Period: n/a	
Deviation Limit: If visible emissions are observed, report a deviation or determine visible emissions per Test Method 9 or 22	
Basis of monitoring: It is widely practiced and accepted to monitor flares for visible emissions by closed circuit cameras and visual inspection. Visible emissions observations indicate that the flare is not efficiently combusting the emissions or there is incomplete combustion. Visible emissions can indicate an improper inlet flow rate or net heating value of the emissions routed to the flare. Monitoring visible emissions is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart A; 30 TAC Chapter 111; and 30 TAC Chapter 115.This procedure is consistent with the EPA “CAM Technical Document” (August 1998) which provides an example of using “EPA Test Method 22-like” procedures for determining visible emissions.	

Unit/Group/Process Information	
ID No.: FLARE2	
Control Device ID No.: FLARE2	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(4)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per day	
Averaging Period: n/a	
Deviation Limit: If visible emissions are observed, report a deviation or determine visible emissions per Test Method 9 or 22.	
Basis of monitoring: It is widely practiced and accepted to monitor flares for visible emissions by closed circuit cameras and visual inspection. Visible emissions observations indicate that the flare is not efficiently combusting the emissions or there is incomplete combustion. Visible emissions can indicate an improper inlet flow rate or net heating value of the emissions routed to the flare. Monitoring visible emissions is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart A; 30 TAC Chapter 111; and 30 TAC Chapter 115.This procedure is consistent with the EPA "CAM Technical Document" (August 1998) which provides an example of using "EPA Test Method 22-like" procedures for determining visible emissions.	

Obtaining Permit Documents

The New Source Review Authorization References table in the FOP specifies all NSR authorizations that apply at the permit area covered by the FOP. Individual NSR permitting files are located in the TCEQ Central File Room (TCEQ Main Campus located at 12100 Park 35 Circle, Austin, Texas, 78753, Building E, Room 103). They can also be obtained electronically from TCEQ's Central File Room Online (https://www.tceq.texas.gov/goto/cfr-online). Guidance documents that describe how to search electronic records, including Permits by Rule (PBRs) or NSR permits incorporated by reference into an FOP, archived in the Central File Room server are available at https://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

All current PBRs are contained in Chapter 106 and can be viewed at the following website:

https://www.tceq.texas.gov/permitting/air/permitbyrule/air_pbr_index.html

Previous versions of 30 TAC Chapter 106 PBRs may be viewed at the following website:

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

Historical Standard Exemption lists may be viewed at the following website:

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

Additional information concerning PBRs is available on the TCEQ website:

https://www.tceq.texas.gov/permitting/air/nav/air_pbr.html

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-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 - 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
OP-UA64 - Coal Preparation Plant Attributes