

Statement of Basis of the Federal Operating Permit

US Department of the Army

Site/Area Name: Fort Hood, U.S. Army
Physical location: Immediately North of Killeen, Tx
Nearest City: Killeen
County: Bell

Permit Number: O1659
Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 9711
SIC Name: National Security

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: December 18, 2013

Operating Permit Basis of Determination

Description of Revisions

Fort Hood submitted a minor revision application which deleted MACT OO from five miscellaneous fuel storage tanks (FS016A, FS017D, FS019A, ST005E, ST007B). Per section policy, the permit reviewer also added updated issuance dates for all NSR permits, per TCEQ agreement on a program-wide EPA comment. Also, per previous agreement with the applicant, updated PBR/SE version dates during this revision. Applicant also deleted a unit and added another unit, by OP-PCA.

Permit Area Process Description

The facility includes the following operations:

1. Aerospace reworking operations. Fort Hood conducts maintenance of helicopters on-site. No manufacturing is conducted. Provided below are descriptions of each type of operation. Many of the aerospace reworking operations are subject to 40 CFR Part 63, subpart GG. The pollutants of concern are VOCs and HAPs.

Primer/Topcoat Application - Two booths are used for primer and topcoat application of helicopter parts. Application is conducted using HVLP spray guns. The painting booths are enclosed structures, Unit Id. SC003 and Unit Id. No. SC007 are dry filter booths. The majority of coating used are considered specialty coatings. The use of coatings other than specialty coatings is less than 50 gallons per year per formulation and less than 200 gallons per year total for the base. The primer/topcoat operations are exempt from 40 CFR Part 63, subpart GG.

Depainting Operations - Fort Hood conducts chemical depainting operations in the form of spot stripping and decal removal of helicopter parts. One of the depainting operations (Unit Id. No. SC015) conducts depainting only on parts removed from the primary aircraft structure. The other depainting operation (Unit Id. No. SC003) conducts depainting on both parts removed from the primary aircraft structure and parts still attached to the primary structure. The chemical strippers are either brush applied, or applied with a cloth and wiped off, or scraped off the parts. The depainting operations are subject to 40 CFR Part 63, subpart GG, except for Unit Id. No SC015. SC015 is exempt because it involves the removal of parts from the primary aircraft before depainting.

Hand-wipe Cleaning Operations - Fort Hood utilizes various cleaners and solvents for hand-wipe cleaning of helicopter parts. These operations are conducted in various maintenance shops and consists of both operations subject to 40 CFR Part 63, subpart GG, and operations exempt from 40 CFR Part 63, subpart GG.

Spray Gun Cleaning - Fort Hood utilizes two enclosed spray gun cleaners, Unit Id. No. SC003 and SC007. The cleaning units utilize a filtration system and sludge collector for long term solvent use. The solvent used for cleaning the spray guns is Inland Technology's EP-921 which has a low VOC content, very low evaporation rate, and does not contain HAPs. The spray gun cleaning operations are subject to 40 CFR Part 63, subpart GG.

Waste Handling and Storage - All wastes generated from form hand-wipe cleaning, primer/topcoat operations, flush cleaning, depainting and spray gun cleaning operations are stored in drums or other enclosed containers, in a manner that minimizes spills and evaporative emissions. The waste handling and storage operations are subject to 40 CFR Part 63, subpart GG. The requirements for these operations are considered site-wide and appear on the terms and conditions of the Federal Operating Permit.

2. **Loading and Unloading of VOCs** - Fort Hood receives jet fuel (JP-8) and gasoline at a central location and is then distributed to different parts of the base in tanker trucks. The operations associated with loading and unloading of gasoline are subject to 30 TAC Chapter 115, subchapter C, Division 1 Loading and Unloading of VOCs. These operations are considered a bulk gasoline plant. Pollutants of concern are VOCs.

3. **Fuel Dispensing Facilities** - Fort Hood has several fuel dispensing facilities. The gasoline dispensing facilities are subject to 30 TAC Chapter 115, subchapter C, Division 2, Filling of Gasoline Storage Vessels (Stage I) for Motor Vehicle Dispensing Facilities. Pollutants of concern are VOCs.

4. **Fuel Storage Tanks** - The facility contains numerous tanks that are used to store jet fuel, gasoline or liquid fuel for the boilers. Group Id. No GRPTAN3 is subject to 40 CFR PART 60, subpart Kb. Tank 12 is associated with a gasoline bulk plant and is therefore exempt from 40 CFR PART 60, subpart Kb. Pollutants of concern are VOCs.

5. **Boilers** - The facility contains several boilers (Groups ECo01, ECo02 and Unit Id. Nos. ECo03 & ECo04). Some boilers are subject to 40 CFR Part 63, subpart Dc and some are grandfathered because of the date of construction. The boilers usually run on natural gas, but some use liquid fuel as backup and are subject to 30 TAC Chapter 112. Pollutants of concern are CO, NOx, PM, and SO2.

7. **Wood Furniture Incidental Manufacturing Operations** - There are three woodworking shops at Fort Hood (WW002, WW004, WW006). The shops make wood cabinets and other wood furniture for use in vehicles and offices, as well as boxes and crates. These shops are considered incidental wood furniture manufacturing operations and are subject to 40 CFR Part 63, subpart JJ, as outlined in the Special Terms and Conditions. The pollutants of concern are VOCs and HAPs.

8. **Landfills** - Fort Hood currently maintains one open landfill, Unit Id. No. MO002. This landfill was opened June 1, 1991 as a Type I municipal sanitary landfill and is comprised of 154 acres. The landfills life expectancy is about 25 years. It is approximately 25 feet deep. MO002 is subject to 40 CFR Part 60, subpart WWW and MACT AAAA. The pollutants of concern are VOCs, and HAPS

 Additionally, there is a recently closed landfill, Unit Id. No. MO001 that was in operation from 1978 to 1991. This closed landfill has an area of 52 acres and a depth of 30 feet. MO001 is not subject to 40 CFR Part 60, subpart WWW.

 Additionally, Fort Hood has a bioremediation site (MO004) subject to MACT GGGGG.

9. **Rock Crushing Operations** – Fort Hood has a rock crushing operation which pounds and grinds construction debris and material (asphalt, concrete, brick, etc.) for use in on-site road base construction and military tank rip-rap. The facility is not subject to NSPS OOO.

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, NOX, NO
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Reading State of Texas's Federal Operating Permit

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

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

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

General Terms and Conditions

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

Special Terms and Conditions

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

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

Attachments

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

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

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

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

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

by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

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

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

Appendix A

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

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

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

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

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

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

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

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

Federal Regulatory Applicability Determinations

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

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	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
CAIR (Clean Air Interstate Rule)	No

Basis for Applying Permit Shields

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

Insignificant Activities

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

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.

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

Determination of Applicable Requirements

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

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for

that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

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

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

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

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

Operational Flexibility

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

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
IC001-3	40 CFR Part 60, Subpart IIII	60IIII	UNIT TYPE = SRIC ENGINES FIRING = CI (DIESEL) ENGINE USAGE=EMERGENCY; NOT FIREPUMP ENGINES CYLINDER DISPLACEMENT=<10 LITERS/CYL MODEL YEAR=>2007 ENGINE POWER=>75KW, <560KW (NMHC+NOX); >130KW, <2237KW (CO); >130KW, <2237KW (PM); <2237KW(OPACITY)	MANUALLY DEVELOPED APPLICABILITIES WITH ATTRIBUTES PROVIDED
IC001-5	40 CFR Part 60, Subpart IIII	60IIII	UNIT TYPE = SRIC ENGINES FIRING =CI (DIESEL) ENGINE USAGE=EMERGENCY; NOT FIREPUMP ENGINES CYLINDER DISPLACEMENT=<10 LITERS/CYL MODEL YEAR=>2007 ENGINE POWER=>75KW, <560KW (NMHC+NOX); >130KW, <2237KW (CO); >75KW, <130KW (PM); <2237KW(OPACITY)	MANUALLY DEVELOPED APPLICABILITIES WITH ATTRIBUTES PROVIDED
IC002-4	40 CFR Part 60, Subpart IIII	60IIII	UNIT TYPE = SRIC ENGINES FIRING = CI (DIESEL) ENGINE USAGE=EMERGENCY; NOT FIREPUMP ENGINES CYLINDER DISPLACEMENT=<10 LITERS/CYL ENGINE POWER=>560KW, <2237KW (NMHC+NOX); >130KW, <2237KW (CO); >130KW, <2237KW (PM); <2237KW(OPACITY)	MANUALLY DEVELOPED APPLICABILITIES WITH ATTRIBUTES PROVIDED
IC003-3	40 CFR Part 60, Subpart JJJJ	60JJJJ	UNIT TYPE = SRIC ENGINES FIRING =SI (SPARK IGNITED) ENGINE USAGE=EMERGENCY CONSTRUCTED/MODIFIED/RECONSTRUCTED=AFTER JANUARY 1, 2009 (FOR EMERGENCY ENGINES) BHP=>130HP	MANUALLY DEVELOPED APPLICABILITIES WITH ATTRIBUTES PROVIDED
MO004	40 CFR Part 63, Subpart GGGGG	63GGGGG	UNIT TYPE=BIOREMEDIATION	MANUALLY DEVELOPED APPLICABILITIES WITH ATTRIBUTES PROVIDED
IC001-2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use. Stationary RICE Type = Compression ignition engine	
IC001-3	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined as a residential emergency RICE, a commercial	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			emergency RICE, or an institutional emergency RICE.	
IC001-5	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.	
IC002-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use. Stationary RICE Type = Compression ignition engine	
IC002-4	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.	
IC003-2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use. Stationary RICE Type = Compression ignition engine	
IC003-3	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.	
IC003-4	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.	
IC004-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use. Stationary RICE Type = 4 stroke spark ignited lean burn engine.	
LR001	30 TAC Chapter 115, Loading and Unloading of VOC	V-1	30 TAC CHAPTER 115 (REG V) FACILITY TYPE = Gasoline bulk plant ALTERNATE CONTROL REQUIREMENT (ACR) [REG V] = No alternate control requirements are being utilized. PRODUCT TRANSFERRED = Gasoline TRANSFER TYPE = Loading and unloading. DAILY THROUGHPUT [REG V] = Loading less than 4,000 gallons of gasoline into transport vessels per day.	
EC001	30 TAC Chapter 112, Sulfur Compounds	112-1	30 TAC CHAPTER 112 (REG II) FUEL TYPE = Liquid fuel. 30 TAC CHAPTER 112 (REG II) HEAT INPUT = Design heat input is less than or equal to 250 MMBtu/hr.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>FEDERAL CLEAN AIR ACT (FCAA) SECTION 412(C) [REG II] = The unit is not subject to the Federal Clean Air Act § 412(c) [FCAA § 412(c)] as amended in 1990.</p> <p>STACK HEIGHT [REG II] = The effective stack height is at least the standard effective stack height for each stack to which the unit routes emissions.</p>	
EC001	40 CFR Part 60, Subpart Dc	60Dc-1	<p>CONSTRUCTION/MODIFICATION DATE = After June 9, 1989 but on or before February 28, 2005.</p> <p>PM MONITORING TYPE = No particulate monitoring.</p> <p>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).</p> <p>SO₂ INLET MONITORING TYPE = Fuel certification (or maintaining receipts).</p> <p>OTHER SUBPARTS = The facility is not covered under 40 CFR Part 60, Subparts AAAA or KKKK, or under an approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart BBBB.</p> <p>SO₂ OUTLET MONITORING TYPE = No SO₂ monitoring.</p> <p>HEAT INPUT CAPACITY = Heat input capacity is greater than 10 MMBtu/hr (2.9 MW) but less than 30 MMBtu/hr (8.7 MW).</p> <p>TECHNOLOGY TYPE = None.</p> <p>D-SERIES FUEL TYPE = Natural gas.</p> <p>ACF OPTION - SO₂ = Other ACF or no ACF.</p> <p>ACF OPTION - PM = Other ACF or no ACF.</p>	
EC001	40 CFR Part 60, Subpart Dc	60Dc-2	<p>CONSTRUCTION/MODIFICATION DATE = After June 9, 1989 but on or before February 28, 2005.</p> <p>PM MONITORING TYPE = No particulate monitoring.</p> <p>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).</p> <p>SO₂ INLET MONITORING TYPE = Fuel certification (or maintaining receipts).</p> <p>OTHER SUBPARTS = The facility is not covered under 40 CFR Part 60, Subparts AAAA or KKKK, or under an approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart BBBB.</p> <p>SO₂ OUTLET MONITORING TYPE = No SO₂ monitoring.</p> <p>HEAT INPUT CAPACITY = Heat input capacity is greater than 10 MMBtu/hr (2.9 MW) but less than 30 MMBtu/hr (8.7 MW).</p> <p>TECHNOLOGY TYPE = None.</p> <p>D-SERIES FUEL TYPE = Distillate oil.</p> <p>ACF OPTION - SO₂ = Other ACF or no ACF.</p> <p>ACF OPTION - PM = Other ACF or no ACF.</p>	
MO001	40 CFR Part 63, Subpart AAAA	63AAAA-1	<p>SUBPART AAAA APPLICABILITY = MSW LANDFILL HAS ACCEPTED WASTE SINCE NOVEMBER 8, 1997 OR HAS ADDITIONAL CAPACITY FOR WASTE DEPOSITION</p> <p>SOURCE CATEGORY = MSW LANDFILL IS NOT A MAJOR SOURCE, BUT IS COLLOCATED WITH A MAJOR SOURCE AS DEFINED IN 40 CFR § 63.2.</p> <p>DESIGN CAPACITY = DESIGN CAPACITY IS LESS THAN 2.5 MILLION MEGAGRAMS (2.75 MILLION TONS) OR LESS THAN 2.5 MILLION CUBIC METERS (3.27 MILLION CUBIC YARDS)</p> <p>FACILITY TYPE = CONVENTIONAL MSW LANDFILL OPERATIONS</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
MO002	40 CFR Part 60, Subpart WWW	60WWW-1	<p>CONSTRUCTION/MODIFICATION DATE = ON OR AFTER MAY 30, 1991</p> <p>DESIGN CAPACITY = DESIGN CAPACITY IS AT LEAST 2.5 MILLION MEGAGRAMS (2.75 MILLION TONS) OR 2.5 MILLION CUBIC METERS (3.27 MILLION CUBIC YARDS)</p> <p>NMOC EMISSION RATE = LESS THAN 50 MEGAGRAMS (55.1 TONS) PER YEAR</p>	
MO002	40 CFR Part 63, Subpart AAAA	63AAAA-2	<p>SUBPART AAAA APPLICABILITY = MSW LANDFILL HAS ACCEPTED WASTE SINCE NOVEMBER 8, 1997 OR HAS ADDITIONAL CAPACITY FOR WASTE DEPOSITION</p> <p>SOURCE CATEGORY = MSW LANDFILL IS NOT A MAJOR SOURCE, BUT IS COLLOCATED WITH A MAJOR SOURCE AS DEFINED IN 40 CFR § 63.2.</p> <p>DESIGN CAPACITY = DESIGN CAPACITY IS GREATER THAN 2.5 MILLION MEGAGRAMS (2.75 MILLION TONS) AND GREATER THAN 2.5 MILLION CUBIC METERS (3.27 MILLION CUBIC YARDS)</p> <p>FACILITY TYPE = CONVENTIONAL MSW LANDFILL OPERATIONS</p> <p>NMOC EMISSION RATE = NMOC EMISSION RATE IS LESS THAN 50 MEGAGRAMS (55.1 TONS) PER YEAR</p>	
GRPAROHCA	40 CFR Part 63, Subpart GG	63GG-3	<p>CONTAINS OPERATIONS IDENTIFIED IN 40 CFR § 63.741(C) = YES</p> <p>40 CFR § 63.741(F) EXEMPTION = NO ACTIVITIES IN THE PROCESS OR FACILITY ARE IDENTIFIED IN 40 CFR § 63.741(F).</p> <p>AFFECTED SOURCE = ALL HAND-WIPE CLEANING OPERATIONS</p> <p>ALTERNATIVE MONITORING METHOD = REQUEST TO ALTERNATIVE MONITORING METHOD[S](AMM) HAS NOT BEEN APPROVED BY THE EPA ADMINISTRATOR OR IS NOT USED</p> <p>CLEANING OF SPRAY GUN = THERE IS NO CLEANING OF SPRAY GUN EQUIPMENT OR IT IS NOT DONE IN ACCORDANCE WITH 40 CFR § 63.744(C)(3)</p> <p>EXEMPT OPERATION = CLEANING OPERATION IS ONE OF THE EXEMPT OPERATIONS LISTED IN 40 CFR § 63.744(E)(1)-(12)</p>	
GRPAROHCB	40 CFR Part 63, Subpart GG	63GG-3	<p>CONTAINS OPERATIONS IDENTIFIED IN 40 CFR § 63.741(C) = YES</p> <p>40 CFR § 63.741(F) EXEMPTION = NO ACTIVITIES IN THE PROCESS OR FACILITY ARE IDENTIFIED IN 40 CFR § 63.741(F).</p> <p>AFFECTED SOURCE = ALL HAND-WIPE CLEANING OPERATIONS</p> <p>ALTERNATIVE MONITORING METHOD = REQUEST TO ALTERNATIVE MONITORING METHOD[S](AMM) HAS NOT BEEN APPROVED BY THE EPA ADMINISTRATOR OR IS NOT USED</p> <p>CLEANING OF SPRAY GUN = THERE IS NO CLEANING OF SPRAY GUN EQUIPMENT OR IT IS NOT DONE IN ACCORDANCE WITH 40 CFR § 63.744(C)(3)</p> <p>EXEMPT OPERATION = CLEANING OPERATION IS NOT ONE OF THE EXEMPT OPERATIONS LISTED IN 40 CFR § 63.744(E)(1)-(12)</p>	
SU001	40 CFR Part 63, Subpart GG	63GG-2	<p>CONTAINS OPERATIONS IDENTIFIED IN 40 CFR § 63.741(C) = YES</p> <p>40 CFR § 63.741(F) EXEMPTION = NO ACTIVITIES IN THE PROCESS OR FACILITY ARE IDENTIFIED IN 40 CFR § 63.741(F).</p> <p>AFFECTED SOURCE = A FLUSH CLEANING OPERATION</p> <p>SEMI-AQUEOUS OR TABLE 1 = NOT ALL CLEANING SOLVENTS USED ARE SEMI-AQUEOUS OR LISTED IN TABLE 1 OF MACT GG</p> <p>EXEMPT OPERATION = CLEANING OPERATION IS NOT ONE OF THE EXEMPT OPERATIONS LISTED IN 40 CFR § 63.744(E)(1)-(12)</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
SU002	40 CFR Part 63, Subpart GG	63GG-3	<p>CONTAINS OPERATIONS IDENTIFIED IN 40 CFR § 63.741(C) = YES</p> <p>40 CFR § 63.741(F) EXEMPTION = NO ACTIVITIES IN THE PROCESS OR FACILITY ARE IDENTIFIED IN 40 CFR § 63.741(F).</p> <p>AFFECTED SOURCE = ALL HAND-WIPE CLEANING OPERATIONS</p> <p>ALTERNATIVE MONITORING METHOD = REQUEST TO ALTERNATIVE MONITORING METHOD[S](AMM) HAS NOT BEEN APPROVED BY THE EPA ADMINISTRATOR OR IS NOT USED</p> <p>CLEANING OF SPRAY GUN = THERE IS NO CLEANING OF SPRAY GUN EQUIPMENT OR IT IS NOT DONE IN ACCORDANCE WITH 40 CFR § 63.744(C)(3)</p> <p>EXEMPT OPERATION = CLEANING OPERATION IS ONE OF THE EXEMPT OPERATIONS LISTED IN 40 CFR § 63.744(E)(1)-(12)</p>	

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

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

NSR Versus Title V FOP

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

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

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

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The

Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

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

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

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

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

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.: 24538	Issuance Date: 05/29/2012
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.142	Version No./Date: 03/14/1997
Number: 106.142	Version No./Date: 03/23/2006
Number: 106.183	Version No./Date: 06/15/1997
Number: 106.183	Version No./Date: 06/18/1997
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.231	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 03/14/1997
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 09/08/1998
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.313	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 03/14/1997
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.418	Version No./Date: 11/26/1997
Number: 106.433	Version No./Date: 03/14/1997
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 03/14/1997
Number: 106.454	Version No./Date: 11/01/2001

Number: 106.472	Version No./Date: 03/14/1997
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 03/14/1997
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.495	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 03/14/1997
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.533	Version No./Date: 03/14/1997
Number: 106.533	Version No./Date: 11/01/2001
Number: 14	Version No./Date: 10/04/1995
Number: 41	Version No./Date: 11/25/1985
Number: 41	Version No./Date: 11/05/1986
Number: 41	Version No./Date: 06/07/1996
Number: 46	Version No./Date: 05/08/1972
Number: 51	Version No./Date: 09/23/1982
Number: 51	Version No./Date: 11/05/1986
Number: 51	Version No./Date: 10/04/1995
Number: 51	Version No./Date: 06/07/1996
Number: 70	Version No./Date: 11/05/198
Number: 70	Version No./Date: 11/25/1985
Number: 70	Version No./Date: 11/05/1986
Number: 70	Version No./Date: 07/20/1992
Number: 70	Version No./Date: 06/07/1996
Number: 75	Version No./Date: 04/05/1995
Number: 75	Version No./Date: 06/07/1996
Number: 80	Version No./Date: 12/01/1972
Number: 80	Version No./Date: 09/17/1973
Number: 80	Version No./Date: 01/08/1980
Number: 80	Version No./Date: 09/23/1982
Number: 80	Version No./Date: 06/07/1996
Number: 86	Version No./Date: 10/04/1995
Number: 89	Version No./Date: 05/04/1994

Number: 102	Version No./Date: 05/04/1994
Number: 106	Version No./Date: 10/04/1995
Number: 107	Version No./Date: 05/04/1994
Number: 107	Version No./Date: 06/07/1996
Number: 110	Version No./Date: 09/12/1989
Number: 113	Version No./Date: 10/04/1995
Number: 124	Version No./Date: 05/04/199
Number: 124	Version No./Date: 05/04/1994
Number: 124	Version No./Date: 06/07/1996
Municipal Solid Waste and Industrial Hazardous Waste Permits With an Air Addendum	
Permit No.: 88412	Issuance Date: 06/05/2009

Emission Units and Emission Points

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

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

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

Monitoring Sufficiency

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

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

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

Periodic Monitoring:

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

Unit/Group/Process Information	
ID No.: EC001	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: 112-1
Pollutant: SO ₂	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: Sulfur Content of Fuel	
Minimum Frequency: Quarterly and within 24 hours of any fuel change	
Averaging Period: n/a*	
Deviation Limit: >440 parts per million by volume (ppmv) at actual stack conditions and averaged over a three-hour period	
Basis of monitoring: A common way to determine SO ₂ emissions is by determining the amount (percentage) of sulfur in fuel combusted by an emission unit. This quantity along with stack flow rate and quantity of fuel combusted may be used to calculate the amount of SO ₂ emitted to the atmosphere.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Available Unit Attribute Forms

- OP-UA1 - Miscellaneous and Generic Unit Attributes
- OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
- OP-UA3 - Storage Tank/Vessel Attributes
- OP-UA4 - Loading/Unloading Operations Attributes
- OP-UA5 - Process Heater/Furnace Attributes
- OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
- OP-UA7 - Flare Attributes
- OP-UA8 - Coal Preparation Plant Attributes
- OP-UA9 - Nonmetallic Mineral Process Plant Attributes
- OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
- OP-UA11 - Stationary Turbine Attributes
- OP-UA12 - Fugitive Emission Unit Attributes
- OP-UA13 - Industrial Process Cooling Tower Attributes
- OP-UA14 - Water Separator Attributes
- OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
- OP-UA16 - Solvent Degreasing Machine Attributes
- OP-UA17 - Distillation Unit Attributes
- OP-UA18 - Surface Coating Operations Attributes
- OP-UA19 - Wastewater Unit Attributes
- OP-UA20 - Asphalt Operations Attributes
- OP-UA21 - Grain Elevator Attributes
- OP-UA22 - Printing Attributes
- OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
- OP-UA25 - Synthetic Fiber Production Attributes
- OP-UA26 - Electroplating and Anodizing Unit Attributes
- OP-UA27 - Nitric Acid Manufacturing Attributes
- OP-UA28 - Polymer Manufacturing Attributes
- OP-UA29 - Glass Manufacturing Unit Attributes
- OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semicheical Pulp Mill Attributes
- OP-UA31 - Lead Smelting Attributes
- OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
- OP-UA33 - Metallic Mineral Processing Plant Attributes
- OP-UA34 - Pharmaceutical Manufacturing
- OP-UA35 - Incinerator Attributes
- OP-UA36 - Steel Plant Unit Attributes
- OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
- OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
- OP-UA39 - Sterilization Source Attributes
- OP-UA40 - Ferroalloy Production Facility Attributes
- OP-UA41 - Dry Cleaning Facility Attributes
- OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
- OP-UA43 - Sulfuric Acid Production Attributes
- OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
- OP-UA45 - Surface Impoundment Attributes
- OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
- OP-UA47 - Ship Building and Ship Repair Unit Attributes
- OP-UA48 - Air Oxidation Unit Process Attributes
- OP-UA49 - Vacuum-Producing System Attributes
- OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
- OP-UA51 - Dryer/Kiln/Oven Attributes

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