Statement of Basis of the Federal Operating Permit

Oil and Gas Sites Located in:

Gregg, Nueces, and Victoria counties

General Operating Permit

Permit Number 512

Standard Industrial Classification (SIC) Code:

1311 Crude Petroleum and Natural Gas

1321 Natural Gas Liquids

4922 Natural Gas Transmission

4923 Natural Gas Transmission and Distribution

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions. It contains sections including a Facility Description, Federal Regulatory Applicability Determinations, Operational Flexibility, New Source Review Requirements, Compliance Assurance and Periodic Monitoring, and Compliance Status.

Operating Permit
Basis of Determination

Description of the Project

The Texas Commission on Environmental Quality (TCEQ) executive director is proposing to issue a revised and renewed General Operating Permit (GOP) Number 512, for Oil and Gas Sites located in Gregg, Nueces, and Victoria counties. This GOP contains revisions to codified applicable requirements, to the codification of standard permits as applicable requirements, and to the compliance assurance monitoring (CAM) section.

Description of the GOP Procedural Requirements

The procedural requirements for the issuance of a GOP by the executive director are in 30 Texas Administrative Code (TAC) Chapter 122, Subchapter F (General Operating Permits). The requirements include a 30-day public comment period, a notice and comment hearing, an affected state review, and a 45-day United States Environmental Protection Agency (EPA) review. Once issued, the GOP will be subject to a 60-day public petition period, during which the public may petition the EPA to object to the GOP.

Notice of the public comment period and the notice and comment hearing on the draft GOP will be published in the *Texas Register*, the TCEQ Air Permits Division (APD) website, and the newspaper of the largest general circulation in the Austin, Dallas, and Houston metropolitan areas. The comment period and the hearing offer the public an opportunity to review and submit comments on the draft GOP. Concurrent with the public comment period, affected states (Arkansas, Colorado, Kansas, Louisiana, New Mexico, and Oklahoma) have the opportunity to comment on the draft GOP. Following the public comment period, the 45-day EPA review period begins, during which time the EPA may object to or comment on the proposed GOP issuance. The executive director may issue the GOP after responding to any EPA comments resolving the objections.

From the date of issuance, the GOP will be subject to public petition for 60 days, as specified in 30 TAC § 122.360 (Public Petition). If the EPA does not file an objection with the executive director during the EPA review period, any person affected by the decision of the executive director to issue the GOP may petition the EPA to make an objection. Petitions shall be based only on objections to the GOP that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates in the petition to the EPA that it was not possible to raise the objections within the public comment period, or that the grounds for the objection arose after the public comment period. The petition shall identify all objections. A copy of the petition shall be provided to the executive director by the petitioner. The executive director shall have 90 days from the receipt of an EPA objection to resolve any objection and, if necessary, terminate or revise the GOP.

Applications for an authorization to operate (ATO) under a GOP are reviewed by the executive director to ensure that the site qualifies for the GOP. Individual ATO applications are not subject to public notice, affected state review, EPA review, and public petition requirements, because these procedural requirements occur during the development of the GOPs by the executive director. After the application review process is complete, the executive director approves ATOs under a GOP without further public notice.

Description of the Facilities

Oil and gas sites that meet or exceed major source thresholds are required to obtain a federal operating permit, according to 30 TAC Chapter § 122.120 (Applicability). For information on major source thresholds refer to 30 TAC Chapter 122, Subchapter A, §122.10(14) (General Definitions) and the Texas State Implementation Plan website located at www.tceq.texas.gov/airquality/sip.

The GOP Number 512 was developed for use by crude petroleum and natural gas, natural gas liquids, natural gas transmission, and natural gas transmission and distribution industry sites that are similar in operation and subject to the applicable requirements codified in this GOP.

Crude petroleum and natural gas industry sites are primarily engaged in operating oil and gas field properties. Such activities may include operation of separators, emulsion breakers, desilting equipment, and field gathering lines for crude petroleum and all other activities in the preparation of oil and gas up to the point of shipment from the producing property. This industry includes the production of oil and the production of gas and hydrocarbon liquids through gasification, liquid faction, and pyrolysis of coal at the mine site. Also included are owners or operators that have complete responsibility for operating oil and gas wells for another group or company on a contract or fee basis.

Natural gas liquids industry sites are primarily engaged in producing liquid hydrocarbons from oil and gas field gases. The hydrocarbon production from these sites include: butane production, casing-head butane and propane production, cycle condensate production, ethane production, fractionating natural gas liquids, isobutane production, liquefied petroleum gases production, natural gas liquids production, natural gasoline production, and propane production.

Natural gas transmission industry sites are primarily engaged in the transmission or storage of natural gas for sale.

Natural gas transmission and distribution industry sites are primarily engaged in both the transmission and distribution of natural gas for sale.

Description of the General Operating Permit Revisions

Section (a) of GOP Number 512 establishes the qualification criteria that owners or operators of sites must meet in order to be eligible to operate under this GOP. The qualification criteria specify the limitations of a GOP. Qualification criteria are used to exclude the types of emission units that are not commonly found at sites that would use the GOP or for emission units with applicable requirements slightly different from many of the other sites. Owners or operators of emission units excluded by qualification criteria must apply for a site operating permit (SOP) for those emission units or the entire site. Alternative means of compliance, alternative means of control, alternative emission limitations or standards, alternative monitoring, compliance plans, or equivalent requirements that must be approved by the executive director or the administrator of the EPA, typically, are not codified in a GOP due to the need for specific provisions.

The executive director updated the qualification criteria to include restrictions on the throughput of gasoline dispensing facilities and the type of fuel an engine not operating under emergency situations can fire.

Section (b) of GOP Number 512 contains site-wide requirements. A site-wide requirement applies uniformly to the emission units at the site covered by the GOP. For example, the executive director has designated the opacity limits for stationary vents in 30 TAC Chapter 111 (Control of Air Pollution from Visible Emissions and Particulate Matter) as site-wide requirements. These requirements were designated as site-wide since many sites have numerous stationary vents and each must comply with the appropriate opacity limit. Additional information relating to permit tables is in the APD document entitled “How to Read a General Operating Permit” located at www.tceq.texas.gov/assets/public/permitting/air/Title_V/General/howto_gops.pdf.

The executive director revised the site-wide requirements. Some of the revisions include formatting, language, and rule referencing to make the GOP consistent with the SOP site-wide requirements. These revisions result in renumbering of terms and conditions in the permit. The revisions are detailed below:

- The executive director revised GOP 512(b)(3) to include references to 30 TAC § 122.146 (Compliance Certification Terms and Conditions) concerning the requirement to certify compliance with monitoring, recordkeeping, reporting, or testing required by the permit.
- The executive director revised GOP 512(b)(9) to remove references to qualification criteria.

- The executive director updated GOP 511(b)(9) to include permit by rule 30 TAC § 106.359 (Planned Maintenance, Startup, and Shutdown (MSS) at Oil and Gas Handling and Production Facilities).
- The executive director revised GOP 512(b)(10) by removing terms relating to 30 TAC § 111.111(a)(1)(A) (Control of Air Pollution from Visible Emissions and Particulate Matter) applicability. Emission sources applicable to § 111.111(a)(1)(A) are required to submit GOP Table (c)(16) or indicate in the ATO application that the emission source is complying with the opacity limitation in § 111.111(a)(1)(B).
- The executive director updated GOP 512(b)(22) by including a term for 40 CFR Part 60, Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution).
- The executive director updated GOP 512(b)(25) by including a reference to 30 TAC Chapter 113, Subchapter C (National Emission Standards for Hazardous Air Pollutants for Source Categories) for emission units subject to a subpart in 40 CFR Part 63.
- The executive director updated GOP 512(b)(26) - (30) by including terms for 40 CFR Part 63, Subpart HH (National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities).
- The executive director updated GOP 512(b)(31) by including a term for 40 CFR Part 63, Subpart CCCCCC (National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities).

Section (c) of GOP Number 512 contains permit tables that provide a codification of applicable requirements including regulatory monitoring, testing, recordkeeping, and reporting requirements for units covered by the GOP. Additional information relating to permit tables may be found in the APD document entitled “How to Read a General Operating Permit” located at www.tceq.texas.gov/assets/public/permitting/air/Title_V/General/howto_gops.pdf.

Most of the applicable requirements codified in section (c) of the draft GOP Number 512 have been revised due to newly promulgated or amended to regulations.

Permit holders operating under an index number in a permit table that has been revised may need to update their applications if applicability determinations and the determination of basis affecting the emission units have changed. The following permit tables contain modifications or corrections.

- GOP Number 512(c) - Updated all tables for consistency with the existing decision support system.

There were no existing permit tables removed from the GOP.

The following new permit tables are included in the GOP:

- GOP Number 512(c)(28) - Boilers and process heaters affected by 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers And Process Heaters).
- GOP Number 512(c)(29) - Boilers and process heaters affected by 40 CFR Part 63, Subpart JJJJJJ (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources).

Compliance Assurance Monitoring (CAM)

Section (d) includes CAM applicability criteria and section (e) contains the CAM option tables. The executive director has made an effort to include all possible pre-approved CAM options from the "Compliance Assurance Monitoring” (APDG 5824) guidance document appropriate for an oil and gas site. The guidance is available on the website www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html.

The following changes were made to the CAM section:

- Added the information from footnotes 1, 2, and 3 in section (e) to section (d) as numbers (5), (6), and (7).
- Corrected the averaging period from one hour to n/a* for options that had a once per day minimum monitoring frequency. Options corrected were CAMG-OG-CC-009, CAMG-OG-CC-061, and CAMG-OG-CC-081.
- Deleted CAMG-OG-CC-065 and CAMG-OG-CC-066 which are duplicates of CAMG-OG-CC-037 and CAMG-OG-CC-038.
- Deleted CAMG-OG-CC-067 and CAMG-OG-CC-068 which are duplicates of CAMG-OG-CC-039 and CAMG-OG-CC-040.
- Deleted CAMG-OG-CC-069 and CAMG-OG-CC-070 which are duplicates of CAMG-OG-CC-041 and CAMG-OG-CC-042.
- Deleted CAMG-OG-CC-071 and CAMG-OG-CC-072 which are duplicates of CAMG-OG-CC-043 and CAMG-OG-CC-044.
- Deleted CAMG-OG-CC-085 and CAMG-OG-CC-086 which are duplicates of CAMG-OG-CC-013 and CAMG-OG-CC-014.
- Deleted CAMG-OG-CC-087 and CAMG-OG-CC-088 which are duplicates of CAMG-OG-CC-015 and CAMG-OG-CC-016.

Periodic Monitoring (PM)

All of the applicable requirements codified in Section (g) of the draft GOP Number 512 remain consistent. Section (f) includes the periodic monitoring applicability criteria and additional monitoring requirements. Section (g) contains the Periodic Monitoring Option Tables. The executive director has made an effort to include all possible periodic monitoring options from the "Periodic Monitoring" (APDG 5241) guidance document appropriate for an oil and gas site. The guidance is available on the website located at www.tceq.state.tx.us/permitting/air/guidance/titlev/tv_fop_guidance.html.

All index numbers and their correlating applicable requirements in the GOP tables have been evaluated to determine if they provide sufficient periodic monitoring. Index numbers determined to have insufficient periodic monitoring have been identified by placing the words "Periodic Monitoring" in the monitoring and testing column of its set of applicable requirements.

It is important to note that the option numbers listed may not be in sequential order. This is due to the fact that these monitoring options are those included in the "Periodic Monitoring" guidance document and not all of those were necessary in this GOP. Permit holders must review the applications for each of their sites and determine if an application for additional periodic monitoring is required. The following permit tables contain index numbers which require additional periodic monitoring:

- GOP Number 512(c)(4) - Storage Vessels affected by 30 TAC Chapter 115, Subchapter B, Division 1 (Storage of Volatile Organic Compounds).
- GOP Number 512(c)(5) - Stationary Vents affected by 30 TAC Chapter 115, Subchapter B, Division 2 (Vent Gas Control).
- GOP Number 512(c)(7) - VOC Water Separators affected by 30 TAC Chapter 115, Subchapter B, Division 3 (Water Separation).
- GOP Number 512(c)(9) - Cold Cleaning Degreasing Operations affected by 30 TAC Chapter 115, Subchapter E, Division 1 (Degreasing Processes).
- GOP Number 512(c)(12) - Storage Vessels affected by 40 CFR Part 60, Subparts K (Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978), and Ka (Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced May 18, 1978, and Prior to July 23, 1984).
- GOP Number 512(c)(18) - Gas Sweetening Units Utilizing Sulfur Recovery affected by 30 TAC Chapter 112 (Control of Air Pollution from Sulfur Compounds).

Origin of Monitoring Options

The CAM and periodic monitoring options developed by the executive director are based on federal and state regulations, historical New Source Review (NSR) permits and EPA guidance and training.

Federal Regulatory Applicability Determinations

The following table summarizes the applicability of the principal air pollution regulatory programs that may apply to areas permitted under GOP Number 512:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment NSR	No
Minor NSR	Yes
40 CFR Part 60 Standards of Performance for New Stationary Sources	Yes
40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants	Yes
40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants for Source Categories	Yes
Title IV Acid Deposition Control	No
Title V Permits	Yes
Title VI Stratospheric Ozone Protection	Yes

The permit tables include the applicability determinations for the emission units based on the index number(s) and all relevant unit attribute information. Each combination of unit attributes information 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

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. Therefore, the tank may need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the application, so that the ATO holder may store either product in the tank.

New Source Review Requirements

NSR authorizations are incorporated by reference in the ATO application and are enforceable under it. Each individual application to operate under a GOP can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas.

GOP Number 512 only covers sites containing emission units authorized by permit by rule (PBR) or standard permits and codified into this GOP. The PBRs codified into GOP Number 512 include:

30 TAC § 106.102 (Comfort Heating);
30 TAC § 106.103 (Air Conditioning and Ventilation Systems);
30 TAC § 106.122 (Bench Scale Laboratory Equipment);
30 TAC § 106.124 (Pilot Plants);
30 TAC § 106.148 (Material Unloading);
30 TAC § 106.183 (Boilers, Heaters, and Other Combustion Devices);
30 TAC § 106.227 (Soldering, Brazing, Welding);
30 TAC § 106.244 (Ovens, Barbecue Pits, and Cookers);
30 TAC § 106.261 (Facilities [Emission Limitations]);
30 TAC § 106.262 (Facilities [Emission and Distance Limitations]);
30 TAC § 106.263 (Routine Maintenance, Start-Up and Shutdown of Facilities, and Temporary Maintenance Facilities);
30 TAC § 106.264 (Replacements of Facilities);
30 TAC § 106.265 (Hand-held and Manually Operated Machines);
30 TAC § 106.266 (Vacuum Cleaning Systems);
30 TAC § 106.351 (Salt Water Disposal [Petroleum]);
30 TAC § 106.352 (Oil and Gas Production Facilities);
30 TAC § 106.353 (Temporary Oil and Gas Facilities);
30 TAC § 106.354 (Iron Sponge Gas Treating Unit);
30 TAC § 106.355 (Pipeline Metering, Purging, and Maintenance);
30 TAC § 106.359 (Planned Maintenance, Startup, and Shutdown [MSS] at Oil and Gas Handling and Production Facilities);
30 TAC § 106.371 (Cooling Water Units);
30 TAC § 106.372 (Industrial Gases);
30 TAC § 106.373 (Refrigeration Systems);
30 TAC § 106.411 (Steam or Dry Cleaning Equipment);
30 TAC § 106.412 (Fuel Dispensing);
30 TAC § 106.433 (Surface Coat Facility);
30 TAC § 106.434 (Powder Coating Facility);
30 TAC § 106.451 (Wet Blast Cleaning);
30 TAC § 106.452 (Dry Abrasive Cleaning);
30 TAC § 106.453 (Washing and Drying of Glass and Metal [Previously SE 42]);
30 TAC § 106.454 (Degreasing Units);
30 TAC § 106.471 (Storage or Holding of Dry Natural Gas);
30 TAC § 106.472 (Organic and Inorganic Liquid Loading and Unloading);
30 TAC § 106.473 (Organic Liquid Loading and Unloading);
30 TAC § 106.474 (Hydrochloric Acid Storage);
30 TAC § 106.475 (Pressurized Tanks or Tanks Vented to a Firebox);
30 TAC § 106.476 (Pressurized Tanks or Tanks Vented to Control);
30 TAC § 106.478 (Storage Tank and Change of Service);
30 TAC § 106.491 (Dual-Chamber Incinerators);
30 TAC § 106.492 (Flares);

30 TAC § 106.496 (Air Curtain Incinerators);
30 TAC § 106.511 (Portable and Emergency Engines and Turbines);
30 TAC § 106.512 (Stationary Engines and Turbines);
30 TAC § 106.531 (Sewage Treatment Facility);
30 TAC § 106.532 (Water and Wastewater Treatment); and
30 TAC § 106.533 (Remediation).

The GOP also covers sites that are permitted by an air quality standard permit under the requirements of 30 TAC Chapter 116, Subchapter F, (Standard Permits) including:

30 TAC § 116.617 (State Pollution Control Project Standard Permit);
30 TAC § 116.620 (Installation and/or Modification of Oil and Gas Facilities);
Air Quality Standard Permit for Electric Generating Units;
Air Quality Standard Permit for Boilers;
Non-rule Air Quality Standard Permit for Oil and Gas Handling and Production Facilities; and
Non-rule Air Quality Standard Permit for Pollution Control Projects.

Compliance Status

All owners and operators operating under a GOP must report all units in compliance at the time of initial issuance of the ATO and at a renewal of the ATO. After initial issuance of an ATO under a GOP, the owner or operator must certify compliance with the terms and conditions of the permit for at least every 12-month period following the initial issuance. Annual compliance certifications should be submitted to the executive director and the EPA administrator no later than 30 days after the end of the certification period.

Additionally, the owner or operator shall report, in writing, all instances of deviations, the probable cause of the deviations, and any corrective actions or preventative measures taken for each emission unit covered by a GOP. A deviation report shall be submitted for at least each six-month period after ATO issuance or at the frequency required by an applicable requirement which requires more frequent reporting. However, no report is required if no deviations occurred over the six-month reporting period. The deviation reports shall be submitted no later than 30 days after the end of each reporting period. Reports submitted under 30 TAC § 101.201 (Emissions Event Reporting and Recordkeeping Requirements) and 30 TAC § 101.211 (Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements) do not substitute for deviation reports. Annual compliance certification and deviation reporting forms were developed and are maintained by the TCEQ Office of Compliance and Enforcement. These forms are available at www.tceq.texas.gov/search_forms.html. Owners or operators needing information regarding annual compliance certifications or deviation reports should contact the TCEQ Office of Compliance and Enforcement, Field Operations Program Support Section at 512-239-0400 or the Small Business and Local Government Assistance program at 1-800-447-2827. Additional resources can also be found at TexasOilandGasHelp.org.

Available Unit Attribute Forms

The following is a list of unit attribute forms applicable to GOP Number 512 applications located at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html:

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-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA35 - Incinerator Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA62 - Glycol Dehydration Unit Attributes