

## **Statement of Basis of the Federal Operating Permit**

### **Oil and Gas Sites Located in:**

Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Ellis, Fort Bend, Galveston, Hardin, Harris, Jefferson, Johnson, Kaufman, Liberty, Montgomery, Orange, Parker, Rockwall, Tarrant, Waller, and Wise counties

### **General Operating Permit**

Permit Number 511

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 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 issues a revised General Operating Permit (GOP) Number 511, for Oil and Gas Sites located in Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Ellis, Fort Bend, Galveston, Hardin, Harris, Jefferson, Johnson, Kaufman, Liberty, Montgomery, Orange, Parker, Rockwall, Tarrant, Waller, and Wise counties. This GOP contains revisions to codified applicable requirements resulting from amended federal rules which are applicable requirements under the Federal Operating Permit Program. The specific revisions are described in the Description of the GOP Revisions section. This GOP is revised to incorporate the 40 Code of Federal Regulations (CFR) Part 60, Subpart OOOOa amendments published in the September 14, 2020 *Federal Register* (85 FR 57018) and September 15, 2020 *Federal Register* (85 FR 57398). The GOP also includes grammatical, stylistic, and other non-substantive revisions to correct citation errors and to update language for administrative preferences.

This issuance of the GOP is a significant revision in accordance with 30 TAC § 122.501(d)(3). The GOP was previously renewed on October 15, 2020. Because 30 TAC § 122.501 requires that GOPs be renewed at least every five years, this GOP shall be renewed no later than October 15, 2025.

### **Description of the GOP Procedural Requirements**

The procedural requirements for the significant revision and issuance of a GOP by the executive director are in 30 TAC Chapter 122, Subchapter F (General Operating Permits). The requirements include a 30-day public comment period with an opportunity to request a notice and comment hearing, an affected states review, and a 45-day United States Environmental Protection Agency (EPA) review. The GOP is subject to a 60-day public petition period during which the public may petition the EPA to object to the GOP.

On November 13, 2020, a notice of the opportunity for public comment and hearing on the draft GOP was published in the *Texas Register*, on the TCEQ Air Permits Division (APD) webpage at [https://www.tceq.texas.gov/permitting/air/nav/titlev\\_news.html](https://www.tceq.texas.gov/permitting/air/nav/titlev_news.html), and in a newspaper of the largest general circulation in the Austin, Dallas, and Houston metropolitan areas. The comment period was from November 13, 2020, through December 16, 2020, and offered the public an opportunity to review and submit comments on the draft GOP. Rather than waiting for a notice and comment hearing to be requested, the executive director scheduled a hearing by telephone conference, on December 11, 2020. Simultaneous with the public comment period, affected states (Arkansas, Colorado, Kansas, Louisiana, New Mexico, and Oklahoma) had the opportunity to comment on the draft GOP. TCEQ received one positive comment from the Texas Pipeline Association and the comment is addressed in the Response to Comments section of this document.

The EPA 45-day review period began on November 13, 2020 and ended on December 28, 2020, during which time the EPA had the opportunity to object to the GOP's issuance. No EPA objections or comments were received.

The GOP is subject to public petition for 60 days from the date of issuance, as specified in 30 TAC § 122.360 (Public Petition). The EPA did not file an objection with the executive director during the EPA review period. As such, any person affected by a 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 have raised 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. After receiving the petition, the EPA may object to the issuance of the GOP only if it is not in compliance with the applicable requirements or the requirements of 30 TAC Chapter 122 (Federal Operating Permits Program). 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 and that proper requirements are identified. Individual applications for an ATO under a GOP are not subject to public notice, affected state review, EPA review, or public petition requirements, because these procedural requirements occur during the development of the GOP 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, in accordance with 30 TAC Chapter § 122.120 (Applicability). For information on major source thresholds, refer to 30 TAC § 122.10(13) (General Definitions) and the Texas State Implementation Plan website located at [www.tceq.texas.gov/airquality/sip](http://www.tceq.texas.gov/airquality/sip).

GOP Number 511 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 the operation of separators, emulsion breakers, desilting equipment, 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 fractionation, and pyrolysis of coal at mine sites. 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 GOP Revisions**

Section (a) of GOP Number 511 establishes the qualification criteria that sites must meet in order to be eligible to operate under the 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 punctuation, acronyms, numbering, title references, and corrected typographical errors throughout the documents. The executive director also updated wording to clarify and improve readability. These administrative changes may not be specifically listed and do not require permit holders to apply for a new ATO.

The executive director included this specific amendment for section (a):

- 511(a)(12) was amended to, “Engines authorized to operate under this GOP shall only be fired with natural gas or diesel fuel, except emergency engines may fire any emergency fuel.” 511(a)(12) was amended to remove (a)(12)(A) for black start engines, fire pump engines, and engines operated less than 100 hours per year that may fire natural gas or diesel fuel from the qualification criteria for emission units authorized to operate under GOP Number 511. This restriction on fuels for emergency or limited-use (less than 100 hours per year) was removed because the engine GOP table requirements for 40 CFR Part 60, Subparts IIII and JJJJ and 40 CFR Part 63, Subpart ZZZZ were expanded in the GOP renewal issued on October 15, 2020 to include compression ignition (CI) engines fired by diesel fuel that are in normal use.

Section (b) of GOP Number 511 contains site-wide requirements. A site-wide requirement applies uniformly to the emission units at the site covered by this 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 site-wide requirements 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](http://www.tceq.texas.gov/assets/public/permitting/air/Title_V/General/howto_gops.pdf).

No revisions were made to site-wide requirements.

Section (c) of GOP Number 511 contains permit tables that codify 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](http://www.tceq.texas.gov/assets/public/permitting/air/Title_V/General/howto_gops.pdf).

No existing permit tables were removed from the GOP.

The applicable requirements codified in GOP Number 511(c) included four revisions amended by 40 CFR Part 60, Subpart OOOOa, and four citation corrections.

The tables were updated to correct errors and incorporate amendments to regulations.

Permit holders operating under an index number in a permit table that was 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 revisions or corrections:

- 511(c)(2) - Glycol Dehydration Unit Vents affected by 40 CFR Part 63, Subpart HH was updated to correct citation errors.
- 511(c)(7) - Storage Vessels affected by 40 CFR Part 60, Subpart Kb was updated to correct citation errors.
- 511(c)(36) - Stationary Reciprocating Internal Combustion Engines affected by 40 CFR Part 63, Subpart ZZZZ was updated to correct citation errors.
- 511(c)(52) - Storage Vessels affected by 40 CFR Part 60, Subpart OOOOa was updated to incorporate the amendments to the regulation.
- 511(c)(54) - Gas Sweetening Units affected by 40 CFR Part 60, Subpart OOOOa was updated to incorporate the amendments to the regulation.
- 511(c)(55) - Fugitive Emissions affected by 40 CFR Part 60, Subpart OOOO was updated to correct citation errors.
- 511(c)(56) - Fugitive Emissions affected by 40 CFR Part 60, Subpart OOOOa was updated to incorporate the amendments to the regulation.
- 511(c)(58) - Well Affected Facilities affected by 40 CFR Part 60, Subpart OOOOa was updated to incorporate the amendments to the regulation.

### **Compliance Assurance Monitoring (CAM)**

Section (d) includes CAM applicability criteria and section (e) contains the CAM Option Tables. The executive director tried to include all possible pre-approved CAM options from the "Compliance Assurance Monitoring" (APDG 5824) guidance document appropriate for an oil and gas site. This guidance is available on the website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\\_fop\\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

No revisions were made to CAM applicability criteria or CAM Option Tables.

### **Periodic Monitoring (PM)**

Section (f) includes PM applicability criteria and additional monitoring requirements, and section (g) contains the PM Option Tables. The executive director tried to include all possible PM options from the "Periodic Monitoring" (APDG 5241) guidance document appropriate for an oil and gas site. This guidance is available on the website located at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\\_fop\\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

No revisions were made to the PM applicability criteria or PM Option Tables.

### Origin of Monitoring Options

The CAM and PM options developed by the executive director were 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 facilities in areas permitted under GOP Number 511:

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 applicability determinations for the emission units based on the index number(s) and all relevant unit attribute information. Each combination of unit attributes information forms the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit that is used to determine the requirements with 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](http://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 unit attributes are included in the application, so that the ATO holder may store either product in the tank.

## NSR 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 TCEQ Central File Room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. Individual applications to operate under a GOP may also be obtained from the TCEQ records webpage, also called Central File Room Online, at <https://www.tceq.texas.gov/agency/data/records-services/welcome-to-tceq-records-online>.

GOP Number 511 only covers sites containing emission units that are authorized by permits by rule (PBR) or standard permits and codified into this GOP. The PBRs codified into GOP Number 511 include:

- 30 TAC § 106.102 (Comfort Heating);
- 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 Handling and 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 standard permits codified into GOP Number 511 include:

- 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;
- Air Quality Standard Permit for Oil and Gas Handling and Production Facilities; and
- 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 the 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 of the ATO. 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, any 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 the ATO issuance or at the frequency required by any applicable requirement which requires more frequent reporting. However, no report is required if no deviations occurred during the six-month reporting period. 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) or 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](http://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, 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 [www.tceq.texas.gov/assistance/industry/oil-and-gas](http://www.tceq.texas.gov/assistance/industry/oil-and-gas).

## Available Unit Attribute Forms

The following is a list of unit attribute forms applicable to GOP Number 511 applications located at [www.tceq.texas.gov/permitting/air/nav/air\\_all\\_ua\\_forms.html](http://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
- OP-UA65 - Gas Well Affected Facilities

## Hearing and Commenters

The draft GOP was subject to a 30-day comment period, during which time any person was eligible to submit written comments. The comment period ended on December 16, 2020. A notice and comment hearing was held via telephone conference on December 11, 2020 at 10:00 a.m. No attendees made formal comments during the hearing. TCEQ received one positive comment from the Texas Pipeline Association.

Simultaneous with the public comment period, affected states (Arkansas, Colorado, Kansas, Louisiana, New Mexico, and Oklahoma) had the opportunity to comment on the draft GOP. No comments were received from affected states.

The EPA 45-day review period began on November 13, 2020 and ended on December 28, 2020. No EPA objections or comments were received.

### **Response to Comments**

COMMENT: The Texas Pipeline Association expressed appreciation to the TCEQ for working quickly to incorporate EPA's OOOOa revisions in the GOP.

RESPONSE: The TCEQ appreciates the support. No changes to the GOP were made in response to this positive comment.

### **Other Changes**

During final preparation of the GOP documents, the language was adjusted to reflect issuance instead of proposal, and the following changes were made:

- Minor grammatical adjustments and non-substantive changes to be consistent with TCEQ formatting requirements.
- Permit table citation corrections:
  - 511(c)(52) - Storage Vessels affected by 40 CFR Part 60, Subpart OOOOa, Index 511-52-008, Regulatory Requirement [Exemption], was updated to correct a citation error from §60.5370(a)-(b) to §60.5370a(a)-(b);
  - 511(c)(56) - Fugitive Emissions affected by 40 CFR Part 60, Subpart OOOOa, Index 511-56-030, Reporting, was updated to correct a citation error from §63.5410(e)(3) to §63.5410a(e)(3); and Indexes 511-56-018, 511-56-019, 511-56-020, and 511-56-021, Recordkeeping from §60.5421(a) to §60.5421a(a); and
  - 511(c)(58), Well Affected Facilities affected by 40 CFR Part 60, Subpart OOOOa Index 511-58-004, Regulatory Requirement [Exemption], was updated to correct a citation error from §60.5370(a)-(b) to §60.5370a(a)-(b).