

Statement of Basis of the Federal Operating Permit

Air Curtain Incinerator

General Operating Permit

Permit Number 518

Standard Industrial Classification (SIC) Code:
1629 Heavy Construction, Not Elsewhere Classified

Operating Permit Basis of Determination

Description of the Project

The Texas Commission on Environmental Quality (TCEQ) executive director issues a revised and renewed Air Curtain Incinerator (ACI) General Operating Permit (GOP) 518. The ACI GOP is issued by the TCEQ executive director under the requirements in Title 30 Texas Administrative Code (30 TAC) Chapter 122, Subchapter F (General Operating Permits). The GOP contains revisions resulting from new and amended federal and state rules, which will be applicable requirements under the Federal Operating Permit Program. The GOP also contains revisions to correct typographical errors, and to update language for administrative preferences. Descriptions of the specific revisions are in the section, Description of the General Operating Permit Proposed Revisions. This GOP fulfills the obligation to renew the ACI GOP 518 every five years as required by 30 TAC § 122.501 (General Operating Permits).

Description of the GOP Procedural Requirements

The procedural requirements for the 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 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.

On June 10, 2016, an opportunity for public comment and hearing on the draft GOP was published in the *Texas Register*, the TCEQ Air Permits Division (APD) web page at www.tceq.texas.gov/permitting/air/nav/titlev_news.html, and in newspapers of the largest general circulation in the Austin, Dallas, and Houston metropolitan areas. The comment period was June 10, 2016 through July 13, 2016. A notice and comment hearing was held in Austin, at the TCEQ headquarters Building E, Room 201S on July 7, 2016 at 10:00 a.m. The comment period and the hearing offered the public an opportunity to review and submit comments on the draft GOP. 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.

The EPA review began on June 10, 2016 and ended on July 25, 2016. EPA had the opportunity to comment on, or object to the proposed GOP issuance. The executive director may issue the GOP after responding to any EPA comments or resolving the objections.

From the date of issuance, December 13, 2016, the GOP is 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 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 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. The petitioner shall provide a copy of the petition to the executive director. 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 applications for an ATO under a GOP 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 Facility

TCEQ issues GOP 518 for use by Title V major and minor, permanent and temporary source ACIs. ACIs (both fireboxes and trench burners) used for the disposal of 100 percent wood waste, 100 percent clean lumber, or 100 percent mixture of only wood waste and/or clean lumber that are subject to the following: 40 Part 60, Subpart CCCC, Standards of Performance for Commercial and Industrial Solid Waste Incineration Units, and 40 CFR Part 60, Subpart EEEE, Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006 are required to obtain a Title V permit and may apply to operate under ACI GOP 518. In 40 CFR Parts 60, Standards of Performance for New Stationary Sources and 62, Approval and Promulgation of State Plans for Designated Facilities and Pollutants, ACIs disposing of 100 percent yard waste are required to obtain a Title V permit, however this type of waste will not be permitted by this GOP. The current permit by rule (PBR) contained in 30 TAC Chapter 106, Permits by Rule, which authorizes ACIs does not authorize the use of ACIs for yard waste; however, it does authorize ACIs for wood waste and land clearing. All New Source Review (NSR) permits must be codified in the GOP. The GOP only permits sources authorized by a PBR. Sources authorized by a case-by-case NSR permit or a standard permit are excluded from the GOP. ACIs burning wood waste and land clearing may be permitted by the GOP because they are authorized by the PBR. ACIs burning yard waste are not permitted by the GOP.

Typically, a site is required to obtain a Title V permit when the site is a major source. However, 40 CFR Part 62, Subpart III and 40 CFR Part 60, Subpart EEEE require minor source ACIs to obtain a federal operating permit. GOP 518 is a permitting mechanism for owners or operators of ACIs subject to this requirement. Operating an ACI unit also requires the use of an engine. Applicable requirements for engines are also included in GOP 518(c).

For thresholds by which sources are classified as major, see our Texas State Implementation Plan web page at www.tceq.texas.gov/airquality/sip. Different thresholds apply to different sites, based on the attainment status of the county in which the site is located.

Description of the General Operating Permit Revisions

Throughout the permit terms, reference to “of this title (relating to)” was deleted to consistently match agency convention in other GOP projects. Reference to “permit holder” was corrected to be more consistent throughout the permit. The GOP also contains revisions to correct typographical errors, to update language for administrative preferences, and to correct numbering.

Section (a):

- 518(a)(1) was amended to specify that no case-by-case permits may be authorized using this GOP.
- 518(a)(2) was added to specify the permits by rule codified in this GOP.
- 518(a)(2) was renumbered to 518(a)(3) and was amended to include all emission units that may be permitted using this GOP.
- 518(a)(4) was added in the interest of being consistent with other GOPs, and because no case-by-case review and alternative means of compliance would qualify for the GOP.
- 518(a)(5)-(8) were renumbered.

Section (b):

- 518(b)(1) was deleted because it was not consistent with federal engine requirements.
- 518(b)(3)(A)(iv) was amended to include provisional terms and conditions. These provisional terms were included so applicants can comply with regulations created or amended after the last GOP action.
- 518(b)(3)(A)(v) was added to more fully address provisional terms and to be consistent with 30 TAC § 122.143(5) (General Terms and Conditions).
- 518(b)(3)(A)(x) was added to be consistent with 30 TAC § 122.143(14).
- 518(b)(3)(B)(ii) and (iii) were amended to use more enforceable language regarding when owners or operators are required to provide records.
- 518(b)(3)(C)(i)(II) and (ii)(II) were amended to be more consistent with 30 TAC § 122.145 (Reporting Terms and Conditions).
- 518(b)(3)(D)(vi) was amended to more clearly state when the owner or operator must provide additional information, and to address credible evidence.
- 518(b)(4) was amended to better match the language regarding avoidance of an authorization to operate found in the TCEQ Municipal Solid Waste GOP.
- 518(b)(5) was amended to clarify where the permit holder is to send the report, what to include on the report, and to be more consistent with the TCEQ Municipal Solid Waste GOP.
- 518(b)(6) was amended to more clearly designate the intended user of the requirement. The change would also make the term more consistent with the TCEQ Municipal Solid Waste GOP and 30 TAC Chapter 122 rule language.
- 518(b)(7) was added to explain the notation [G] in the GOP tables, consistent with other GOPs.
- 519(b)(8) was amended to more closely match language in the TCEQ Municipal Solid Waste GOP.
- 518(b)(8)(B) was added to include all potentially applicable PBRs.
- 519(b)(9) was amended to be consistent with visible emissions language found in Site Operating Permits.
- 519(b)(10) and (11) were added to move the Chapter 113 section of the terms to better match the rule order found in other GOPs.
- 519(b)(12)(A) was added to address all potentially applicable sections in Chapter 117.
- 519(b)(12)(E) and (F) were added to correctly reference the Chapter 117 Subchapter.
- 519(b)(13) was added to move the 40 CFR Part 60 portion of the terms to better match the rule order found in other GOPs.
- 519(b)(13)(C)(i) was amended to remove, “unless the executive director approves another format” in regards to records of opacity tests since both paper and electronic formats are already discussed in the term.
- 519(b)(13)(C)(viii) was amended to be more consistent with § 60.8 (Performance Tests).
- 519(b)(14) was added to separate alternate schedule requirements for more accurate referencing.
- 518(b)(15)(A)(ii) was deleted because it refers to a federal rule that no longer exists.
- 519(b)(15)(C)(iv) was amended to more completely describe 6-minute average opacity values consistent with 40 CFR § 60.2260(d) (What are the Recordkeeping and Reporting Requirements

for Air Curtain Incinerators?).

- 519(b)(16)(C)(ii) was amended to remove “or for an inspector’s review.” Although an inspector’s review is one instance when records are required to be made available to TCEQ, it is not specified elsewhere in this GOP when discussing records, so it was removed for consistency.
- 519(b)(17) was added to move the Chapter 101 section of the terms to better match the rule order found in other GOPs.
- 519(b)(18) and (19) were added to address potential applicability to 40 CFR 63, Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines).

Section (c) of the GOP 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 permit table information is in the APD guidance document “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 518 were revised due to newly promulgated or amended 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 change.

All tables in GOP 518(c) were updated for consistency with the existing decision support system located at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html.

No previously existing permit tables were removed from the GOP.

The following new permit table was added to the GOP.

518(c)(3) - Stationary internal combustion engines affected by 40 CFR Part 63, Subpart ZZZZ (National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines).

Compliance Assurance Monitoring

CAM is a federal monitoring program established under 40 CFR Part 64, Compliance Assurance Monitoring. It applies to emission units at major sources that are subject to 30 TAC Chapter 122 and meet all the following: the emission unit is subject to an emission limitation or standard in an applicable requirement; the emission unit uses a control device to achieve compliance with the emission limitation or standard; and the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year required for a site to be classified as a major source. Each applicable regulation was evaluated for Compliance Assurance Monitoring (CAM) and it was determined that CAM is not applicable.

Periodic Monitoring

Periodic monitoring applies to emission units at a site that are subject to 30 TAC Chapter 122, provided that the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement, excluding those emission limitations or standards identified in 30 TAC § 122.602(b), Periodic Monitoring Applicability. All terms, conditions, index numbers, and their correlating applicable requirements in the GOP were evaluated for periodic

monitoring and it has been determined that they provide sufficient periodic monitoring.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs that may apply to areas permitted under GOP 518.

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	No
40 CFR Part 62 Approval and Promulgation of State Plans for Designated Facilities and Pollutants	Yes
40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants 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	No

Operational Flexibility

Operation of ACIs may vary so long as owners or operators meet the terms and conditions of this permit and the requirements of the PBR.

New Source Review Requirements

New source review authorizations are incorporated by reference in the GOP 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 518 only covers sites containing emission units authorized by permit by rule (PBR) and codified into this GOP. The PBRs codified into GOP 518 include:

- 30 TAC § 106.263 (Routine Maintenance, Start-up and Shutdown of Facilities, and Temporary Maintenance Facilities);
- 30 TAC § 106.496 (Air Curtain Incinerators);
- 30 TAC § 106.511 (Portable and Emergency Engines and Turbines); and
- 30 TAC § 106.512 (Stationary Engines and Turbines).

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 an initial ATO is issued, 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, all instances of deviations, the probable cause of the deviations, and any corrective actions or preventative measures taken for the deviations. A deviation report should be submitted for at least each six-month period after permit 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 are available at www.tceq.texas.gov/field/acguide.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.

Available Forms

The ACI application form applicable to GOP 518 is located at www.tceq.texas.gov/permitting/air/titlev/generalpermits/gop_no_518.html.

Hearing and Commenters

The draft GOP and tables were subject to a 30-day comment period, during which time, any person was eligible to submit written comments on the draft GOP. The following five written comments were received from the EPA during the comment period.

Comment 1:

The EPA noted that permit holders should demonstrate compliance with emission standards for other pollutants, in addition to Nitrous Oxide (NO_x). The EPA cited permit conditions (a)(4) and (b)(12) and expressed concern that National Ambient Air Quality Standards (NAAQS) pollutants other than NO_x may be emitted since the Air Curtain Incinerator (ACI) General Operating Permit (GOP) authorizes burning wastes at landfills and noncommercial industrial sites, in addition to lumber and brush. The EPA asked if the permit has specific monitoring requirements to demonstrate ongoing compliance with the regulatory tonnage thresholds for NAAQS pollutants.

Response 1:

The ACI GOP conditions will limit both the size of the trench and the materials that air curtain incinerators may combust so that the resulting concentrations of NAAQS pollutants are not expected to exceed the NAAQS thresholds. Specifically, permit condition (a)(5) limits permit holders to only combust certain materials authorized under 30 TAC § 106.496. These authorized materials include trees, clean lumber, and brush from land clearing operations. In the Statement of Basis, "Description of the Facility" section, it also reiterates that no other wastes except "for the disposal of 100 percent wood waste, 100 percent clean lumber, or 100 percent mixture of only wood waste and/or clean lumber" are authorized under GOP 518. Because permit condition (a)(7) limits the size of the associated engines, the Air Permits Division does not expect additional pollutants to be associated with operations authorized under this GOP.

Permit condition (b)(12), referenced by the commenter, is included to capture the 30 TAC Chapter 117 requirements associated with engines providing air to the ACI for more effective burning and

smoke reduction. The Air Permits Division agrees that 30 TAC § 106.4 contains annual tonnage requirement thresholds of all NAAQS pollutants including volatile organic compounds (VOC), sulfur dioxide (SO₂), nitrous oxide (NO_x), particulate matter (PM₁₀ and PM_{2.5}), as well as 25 tons per year (tpy) of any other air contaminant which is not a NAAQS, as identified in the rule. Ongoing compliance is demonstrated by annual air emissions inventory fee certification, as well as the 600 hour run meter restriction and associated recordkeeping found in 30 TAC § 106.496.

In addition, 30 TAC § 106.8(c) requires the owner or operator to maintain records to demonstrate that the facility is in compliance with the requirements of 30 TAC § 106.4, including the annual emission limitations on the specified pollutants. In the event that the permit holder is unable to comply with the requirements of either § 106.4 or § 106.496, they will be required to obtain an NSR case-by-case permit and a Site Operating Permit (SOP).

Comment 2:

The EPA recommends that permit condition (a)(7) reference permit condition (b)(12) to indicate the location of NO_x monitoring, recordkeeping, and reporting requirements.

Response 2:

The executive director (ED) would like to clarify that the GOP has been outlined such that Section (a) establishes qualification criteria, Section (b) establishes terms and conditions and Section (c) codifies unit specific requirements not codified in Section (b). All GOPs issued by the ED have been formatted in this manner. Section (b)(12) of this GOP codifies the requirements for stationary reciprocating internal combustion (SRIC) engines at any stationary source of NO_x that is a minor source of NO_x in the Houston-Galveston-Brazoria Ozone Nonattainment Area or the Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area. Referencing these specific terms and conditions requirements within Section (a) could cause applicants to be confused about whether they qualify for the GOP or not, since not all sources meeting the qualification criteria are subject to (b)(12). The NO_x monitoring, recordkeeping, and reporting requirements are included in the terms and conditions and requirements tables (found within Section (c)) in this GOP. For the reasons identified in this response, and to avoid confusion, (a)(7) has not been revised.

Comment 3:

The EPA noted that 30 TAC § 106.496(b)(5) cites 30 TAC § 330.4, which is no longer a section in the Texas Administrative Code.

Response 3:

The Air Permits Division appreciates the comment and has made note of the error. The Air Permits Division will propose that the commission update the reference from 30 TAC § 330.4 to 30 TAC § 330.7 in a separate 30 TAC Chapter 106 rulemaking in the future.

Comment 4:

The EPA requested that permit condition (b)(8) should explicitly state that only the NSR authorizations listed in (b)(8) can be incorporated by reference under this GOP.

Response 4:

New permit condition (a)(2) was added to qualification criteria to clarify that only the NSR authorizations listed in (b)(8) may be incorporated by reference under this GOP. Permit Condition (a)(2) states:

“(2) This GOP codifies the following permits by rule (PBR):

- (A) 30 TAC § 106.263 (Routine Maintenance, Start-up and Shutdown of Facilities, and Temporary Maintenance Facilities);
- (B) 30 TAC § 106.496 (Air Curtain Incinerators);
- (C) 30 TAC § 106.511 (Portable and Emergency Engines and Turbines); and

(D) 30 TAC § 106.512 (Stationary Engines and Turbines).”

Comment 5:

EPA asked several questions regarding the portion of the GOP regarding maintenance, startup, and shutdown (MSS). First, EPA asked what the maximum MSS emission quantities would be, and the maximum duration of MSS emissions that would be allowed under the GOP. EPA also asked what specific best practices criteria are in place for ensuring that MSS emissions are decreased. Finally, the EPA asked for the location of maintenance timeframes that specify the time in which repairs must be completed.

In addition, EPA asked how the MSS emissions are recorded and reported, and how the emissions will be enforced.

Response 5:

MSS emissions are authorized for ACIs by the relevant PBR(s), as cited in (a)(2). The Air Permits Division reviewed each of the permits by rule listed in (a)(2) to determine that the MSS emissions are of the same quantity as the production emissions, and concluded that MSS emissions related to ACI operations are expected to be equal to, or less than, the routine operating emissions. There is no legal requirement that MSS emissions be decreased. Therefore, there is no maximum duration on the MSS emissions. Specific examples of ACI “best practices” criteria include the following requirements, found in § 106.496:

- Maintaining the ACI at all times, including startup and shutdown; providing augmented air to the ACI, to ensure effective burning and smoke control;
- Limiting daily burning to begin no earlier than one hour after sunrise;
- Completion of burning the same day, not later than one hour before sunset;
- Ensuring that embers are not flaming or smoking at the end of the burn;
- Adding no additional fuel to the ACI;
- An operator must remain with the ACI when it is operating;
- Controlling visible emissions from the ACI, stockpiles, work areas, and any in-plant roads associated with the facility by not leaving the property for a period exceeding 30 seconds in any six-minute period;
- Operating the ACI blower in a manner to minimize smoke and ash becoming airborne;
- No stacking of material above the air curtain;
- Keeping the ACI blower on at the end of daily burning until enough material is consumed, so that any remaining material in the trench does not flame or cause smoke that exceeds the requirement when the blower is turned off; and
- Requiring deep vertical sides to assure adequate air recirculation of the ACI to ensure effective burning and smoke control.

Examples of ACI reporting and recordkeeping requirements found in § 106.496 include:

- Requiring the permit holder to retain a copy of the property deed if the ash is to be disposed of by burying it on-site;
- Reporting and recordkeeping requirements as applicable in 40 CFR Part 60, Subpart CCCC;
- Requiring notification for relocation of the ACI;
- Maintaining a log of hours of operation; and

- Maintaining records that demonstrate distance requirements.

In addition to the criteria listed above, and per GOP condition (b)(13)(C)(iv), permit holders must maintain and operate the ACI at all times, in a manner consistent with good air pollution control practices for minimizing emissions. The determination of whether acceptable operating and maintenance procedures are being used is based upon information available to the agency, but is not limited to monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The reference to “at all times” includes periods of MSS.

Scheduled maintenance on ACIs would be minimal and limited to replacing inoperative ACI blower engines with operational blower engines. Trench building, trench fill-in, and loading of the ACI would be considered part of routine ACI operations. ACI startup operations are discussed earlier in this response; shutdowns should normally occur over a time sufficient for all material in the ACI to be completely extinguished, and would also be considered as routine operations. Finally, the TCEQ requires that ACI MSS emissions are accounted for because of the recordkeeping and reporting requirements of the relevant PBR(s), as cited in (a)(2).

Therefore, for ACI GOP permit holders, the MSS best practices criteria, along with associated maximum allowable emission limits for the duration of emissions, maintenance responsibilities, recordkeeping, and reporting requirements are found in 30 TAC §§ 106.4, 106.8, 106.263, 106.496, 106.511, and 106.512. Additionally, GOP term and condition (b)(3) references the General Terms and Conditions of 30 TAC § 122.143, incorporated as GOP permit term and condition (b)(3)(A)(iv), which states that any noncompliance with the terms and conditions of the permit constitutes a violation of the Federal Clean Air Act and the TCAA , and is grounds for an enforcement action by the TCEQ.

A notice and hearing was held in Austin on July 7, 2016 at 10:00 a.m. in 201S, Building E of the TCEQ offices, located at 12100 Park 35 Circle, Austin. No comments were received at the hearing.

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.