

Statement of Basis of the Federal Operating Permit

Air Curtain Incinerators Located in Texas:

General Operating Permit

Permit Number 518

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

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, Periodic and Compliance Assurance Monitoring, and Compliance Status.

OPERATING PERMIT BASIS OF DETERMINATION

DESCRIPTION OF THE PROJECT

The Texas Commission on Environmental Quality (TCEQ or commission) executive director is issuing new General Operating Permit (GOP) Number 518, Air Curtain Incinerators (ACIs) Located in Texas. The Federal Clean Air Act (FCAA) authorizes the issuance of general permits covering numerous similar sources. [42 USC, § 7661c(d)]. This GOP fulfills the obligation for an initial issuance for the ACI GOP as required by Title 30 Texas Administrative Code (30 TAC) § 122.501 (General Operating Permits). The GOP sets forth requirements for ACIs. ACIs required to obtain a federal operating permit that qualify for this GOP may apply to the TCEQ for coverage under the permit terms. Such applications do not require compliance with the public participation procedures in Title 40 Code of Federal Regulations (40 CFR) § 70.7(h) (Permit Issuance, Renewal, Reopenings, and Revisions) or 30 TAC Chapter 122, Subchapter D (Public Announcement, Public Notice, Affected State Review, Notice and Comment Hearing, Notice of Proposed Final Action, EPA Review, and Public Petition).

DESCRIPTION OF THE GOP PROCEDURAL REQUIREMENTS

The GOP Number 518 is issued by the TCEQ executive director under the 30 TAC Chapter 122, Subchapter F, which included 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. 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 January 5, 2007, an opportunity for public comment and hearing on the draft GOP was published in the *Texas Register*, the TCEQ Air Permits Division (APD) Internet site, and in the *Austin American Statesman*, *Houston Chronicle*, and *Dallas Morning News*. The comment period offered 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) had the opportunity to comment on the draft GOP. The public comment and affected states review periods officially closed February 9, 2007. Comments were received from the Associated General Contractors of Texas and Harris County Public Health and Environmental Services. The 45-day EPA review followed the public comment period. The review period began on March 20, 2007, and ended on May 7, 2007 and the EPA had the opportunity to object to the proposed GOP issuance. No comments were submitted by the EPA on the proposed GOP.

From the date of issuance, June 1, 2007, the GOP is subject to public petition for 60 days, as specified in 30 TAC § 122.360 (Public Petition). 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. A copy of the petition shall be provided to the executive director by the petitioner. Petitions must be filed with the EPA on or before July 31, 2007. After receiving a 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. Individual GOP 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 FACILITY

The GOP Number 518 was developed 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 40 CFR Part 62, Subpart III (Federal Plan Requirements for Commercial and Industrial Solid Waste Incineration Units That Commenced Construction On or Before November 30, 1999) or 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 the ACI GOP Number 518. Title 40 CFR Parts 60 (Standards of Performance for New Stationary Sources) and 62 (Approval and Promulgation of State Plans for Designated Facilities and Pollutants), require ACIs disposing of 100 percent yard waste 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 or standard permit. Sources authorized by a case-by-case NSR permit will be 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 cannot.

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. The GOP Number 518 was developed as a permitting mechanism for owners or operators of ACIs subject to this requirement.

The following table demonstrates the thresholds by which sites are classified as major. Different thresholds apply to different sites, based on the attainment status of the county in which the site is located. If the ACI is located on a site classified as major because of other units at the site, the site cannot be permitted under GOP Number 518.

County	Area Ozone Nonattainment Classification	Major Source Thresholds (tpy)								
		VOC	NO _x	SO ₂	PM-10 ¹	CO	Pb	HAP ²	HAPs ³	Other ⁴
Bexar, Comal, and Guadalupe	Basic	100	100	100	100	100	100	10	25	100
Harding, Jefferson, and Orange	Marginal	100	100	100	100	100	100	10	25	100
Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller	Moderate	100	100	100	100	100	100	10	25	100
Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant	Moderate	100	100	100	100	100	100	10	25	100
All Other Texas Counties	Unclassified or Attainment	100	100	100	100	100	100	10	25	100

Notes:

1. Particulate matter (PM) may be used as a surrogate to demonstrate that PM-10 levels are below the major source threshold. For example, if data demonstrates that PM is less than 100 tpy, the data can be used to demonstrate that PM-10 is less than 100 tpy. However, if PM levels are greater than or equal to 100 tpy, then additional data must be provided to demonstrate that PM-10 levels are less than 100 tpy.
2. Any single hazardous air pollutant (HAP). Elemental lead is not included in lead compounds per FCAA § 112(b)(7).
3. Any combination of HAPs.
4. Any other regulated air pollutant as defined in 30 TAC § 122.10, including, but not limited to non-methane organic compounds (NMOC) at municipal solid waste landfills.

DESCRIPTION OF THE GENERAL OPERATING PERMIT

Section (a) of GOP Number 518 establishes the qualification criteria for this GOP. Only ACIs authorized by the current or previous versions of the PBR in 30 TAC § 106.496 (Air Curtain Incinerators) qualify for the GOP. ACIs authorized by a case-by-case NSR permit do not qualify for operation under the GOP and must apply for a site operating permit (SOP). Since this GOP cannot contain compliance provisions or schedules, owners or operators must apply for a SOP that contains a compliance schedule if the ACI is out of compliance at the time of application submittal. In addition, only ACIs that only combust 100 percent wood waste, 100 percent clean lumber, or 100 percent mixture of only wood waste and/or clean lumber may be authorized under this GOP. All units other than ACIs are excluded from coverage under this GOP. Alternative means of compliance, alternative means of control, alternative emission limitations or standards, 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. Owners or operators of emission units excluded by qualification criteria or having applicable requirements not codified in the GOP must apply for an SOP for those emission units or the entire site.

Section (b) of GOP Number 518 establishes the terms and conditions for ACIs. The ACI is the only permitted source in the GOP. The primary requirements pertain to opacity. However, many of the terms are general requirements for all Title V sources, as found in SOPs. The permit holder must be in compliance with all the terms and conditions, as applicable. Stakeholder meetings were held in Austin, Beaumont, and Houston. Stakeholders were provided a draft of the GOP, which referenced the applicable requirements by reference. Stakeholders requested the GOP explain in more detail the requirements that must be met. Although it is the permit holder's responsibility to comply with all the requirements of the GOP, including those by reference,

GOP Number 518 details the requirements of significance. The following terms are of importance and should be distinguished:

- GOP Number 518(b)(1) requires the permit holder to notify the regional office and local air pollution control agencies having jurisdiction when the ACI changes location and maintain records including the dates of each location. This is currently required by 30 TAC § 106.496.
- GOP Number 518(b)(3) contains the terms and conditions relating to GOPs in 30 TAC Chapter 122. These terms include permit timeframe, recordkeeping, reporting, and compliance certification. A comment was received requesting these reports be made available to local air pollution control agencies having jurisdiction and this language has been included in these requirements as appropriate.
- GOP Number 518(b)(5) specifies all reports that must be sent to the TCEQ Central and Regional Offices. The term identifies what information must be included in the cover letter of the report.
- GOP Number 518(b)(6) requires the permit holder to certify compliance with all the permit terms and conditions of the GOP. The certification period must not exceed 12 months and must be submitted within 30 days of the period being certified.
- GOP Number 518(b)(7) states that a copy of the GOP and records related to the requirements in the GOP must be at the location specified in the GOP application.
- GOP Number 518(b)(9) details the requirements for NSR authorizations. This includes the general requirements for PBRs, and specifically for the ACI PBR contained in 30 TAC §106.496 (Air Curtain Incinerators).
- GOP Number 518(b)(10) contains the visible emissions requirements for 30 TAC Chapter 111 (Control of Air Pollution from Visible Emissions and Particulate Matter). The permit holder is required to maintain 30 percent opacity for any six-minute period. Records of deviations from this opacity must be maintained and reported in the semi-annual deviation reports which are specified in GOP Number 518(b)(3)(C)(ii). A certified opacity reader is not required for these recorded observations, however if there is a question whether a deviation has occurred and the permit holder wants to evaluate it more to not include it as a deviation, a certified opacity reader must conduct the observation.

Comments were received on this requirement requesting clarification on the quarterly observations. This requirement has been revised to explain when an ACI must conduct visible emission observations. An additional comment requested proper certification of the opacity reader be maintained at the site. This requirement has been added.

- GOP Number 518(b)(11) contains the general requirements for units subject to 40 CFR Part 60 (Standards of Performance for New Stationary Sources). These requirements include notification, recordkeeping, performance testing, and monitoring. A comment was received requesting this information be made available to local air pollution control agencies having jurisdiction and this language has been included in these requirements as appropriate.
- GOP Numbers 518(b)(12)-(14) are the federal terms and conditions the permit holder must meet for the ACI, depending on date of initial startup, unit type, and major source status. Initial startup is the first time the ACI is started at a new site. An opacity of 10 percent over a 6-minute average must be maintained during all times of operation, except that an opacity of 35 percent over a 6-minute average

must be maintained during the first 30 minutes of the initial startup and during annual performance tests. A performance test must be conducted initially when the ACI is fired for the first time, and annually thereafter. Method 9 of 40 CFR Part 60, Appendix A must be used to determine compliance with the opacity limitations. Method 9 requires that a certified opacity reader be used to determine compliance. A person may become a certified opacity reader by attending a TCEQ approved Visible Emissions Evaluators Course. For more details on approved courses visit the TCEQ website at www.tceq.state.tx.us/compliance/compliance_support/licensing/smoke_school.html. The federal and 30 TAC Chapter 111 opacity requirements differ, however the permit holder must meet both requirements. If these requirements are not met, they must be reported as a deviation to the requirement(s) for which the opacity limit is not met, as applicable.

A comment was received questioning the definition of “malfunction.” The definition of “malfunction” has been added to GOP Number 518(b)(12)(A)(ii).

- GOP Number (b)(15) contains the requirements in 30 TAC Chapter 101 (General Air Quality Rules). These include emissions inventory, emissions fees, and recordkeeping and reporting requirements relating to maintenance, startup, and shutdown.

COMPLIANCE ASSURANCE MONITORING

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under 40 CFR Part 64 (Compliance Assurance Monitoring). CAM 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. CAM is not applicable to ACIs. The preamble for 40 CFR Part 60, Subpart EEEE which regulates ACIs, states “air pollution control devices are unavailable for air curtain incinerators.” (69 FR 71482) Since the use of control devices on ACIs is not anticipated, and one of the requirements for CAM applicability is the presence of a control device, CAM for ACI units is not addressed in the GOP.

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), such as the opacity standards in this GOP required by 40 CFR Parts 60 and 62. Periodic monitoring requirements for ACI units are included in GOP 518 for 30 TAC Chapter 111.

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 Number 518.

Regulatory Program	Applicability (Yes/No)
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PSD	No
Nonattainment NSR	No
State NSR	Yes
40 CFR Part 60	Yes
40 CFR Part 61	No
40 CFR Part 62	Yes
40 CFR Part 63	No
Title IV	No
Title V	Yes
Title VI	No

OPERATIONAL FLEXIBILITY

Operation of ACIs may vary so long as the terms and conditions of this permit are satisfied and the requirements of the PBR are met.

NEW SOURCE REVIEW REQUIREMENTS

New source review permits are incorporated by reference in the GOP application and are enforceable under it. The only NSR authorization permitted is 30 TAC § 106.496 and all previous versions.

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. 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 no later than 30 days after the end of the certification period. For example, an ATO is issued on February 27, 1998. The compliance period ends on February 27, 1999, however, the additional 30 days allows the certification to be submitted no later than March 29, 1999. Another compliance certification is then due March 29, 2000. A copy of the compliance certification will also be made accessible to the EPA.

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. A deviation report should 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 should be submitted no later than 30 days after the end of each reporting period. It is also important to note that 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. Owners or operators needing information regarding annual compliance certifications or deviation reports should contact the TCEQ Office of Compliance and Enforcement, Field Operations Division, at (512) 239-0400.

AVAILABLE UNIT ATTRIBUTE FORMS

Unit attribute forms were not developed and are not needed for GOP Number 518. The GOP, as a whole, applies only to the ACI, so the GOP contains only terms and conditions.

HEARING AND COMMENTORS

The GOP was subject to a 30-day comment period and a notice and comment hearing was held in Austin on February 6, 2007 at the commission's central office. No one attended the hearing. Written comments were received from the Associated General Contractors of Texas (AGC) and Harris County Public Health and Environmental Services (HCPHES).

RESPONSE TO COMMENTS

Comment 1

AGC requested a separate set of guidelines and requirements for portable trench burners.

Response 1

The executive director has made no changes in response to this comment. The EPA did not distinguish between permanent and portable ACIs in the federal regulations. The requirements for permanent and portable ACIs are the same.

Comment 2

AGC stated that most portable trench burner sites are unimproved and the provision for keeping records on site is not feasible.

Response 2

The executive director has made no changes in response to this comment. As stated in GOP Number 518(b)(3)(B)(iii), 30 TAC Chapter 122 requires the records be maintained at the location the ATO is located, not necessarily the site itself. The ATO letter may be maintained off site, but it must be identified in the GOP application. However, the underlying NSR authorization for ACIs in 30 TAC § 106.496 (Air Curtain Incinerators) requires a copy of 30 TAC § 106.496 be kept at the burn site.

Comment 3

AGC believes that the current PBR for portable trench burners is appropriate and facilitates compliance by operators because it is well suited for the operation of facilities that change location often. In lieu of retaining the current PBR for portable operations, AGC welcomes the opportunity to work with the agency to establish more reasonable provisions for these facilities in the draft GOP.

Response 3

The executive director appreciates AGC's willingness to assist the agency in the development of the GOP. The federal rules require ACIs to obtain a Title V operating permit and the operating permit, in general, codifies the applicable requirements for which units must be in compliance. The PBR is the underlying NSR authorization

for these facilities, which is a separate requirement from the requirement to obtain a Title V operating permit. The owner or operator of the ACI must have both an NSR authorization and a Title V permit. The conditions of the PBR are applicable requirements of the Title V permit.

Comment 4

HCPHES requested that local air pollution control agencies having jurisdiction also be notified when ACIs change location.

Response 4

The executive director agrees local air pollution control agencies should be notified in change of locations. GOP Number 518(b)(1) has been revised to include local air pollution control agencies having jurisdiction to receive notifications of change of location.

Comment 5

HCPHES requested that the permit holder also report all instances of deviations, the probable cause, and any corrective actions to local air pollution control agencies having jurisdiction.

Response 5

The executive director has made no changes in response to this comment. The TCEQ Regional Offices will make deviation reports readily available to local air pollution control agencies having jurisdiction.

Comment 6

HCPHES requested that copies of compliance certifications also be made available to local air pollution control agencies having jurisdiction, and suggests elimination of the word "TCEQ" from the phrase "...submitted to the Executive Director and the EPA TCEQ."

Response 6

The executive director agrees. Proposed GOP Number 518(b)(3)(D)(iii) has been revised to ensure that copies of compliance certifications are accessible to local air pollution control agencies having jurisdiction. In addition, this requirement has been revised to correct the typographical error.

Comment 7

HCPHES requested that the opacity requirements in GOP Numbers 518(b)(10), (b)(12)(A), (b)(13)(A), and (b)(14)(A) be made consistent with the each other.

Response 7

The executive director has made no changes in response to this comment. GOP Number 518(b)(10) is the codification of 30 TAC Chapter 111, which requires a more stringent opacity during startup. In addition, these requirements have periodic monitoring and recordkeeping on a quarterly basis. GOP Numbers (b)(12)(A), (b)(13)(A), and (b)(14)(A) are the federal rules and require monitoring on an annual basis. The executive director recognizes the differences in these requirements and has determined that, because the GOP covers many sources, it is inappropriate to establish a stringency determination into a GOP without providing owners and operators the opportunity to request it.

Comment 8

HCPHES requested that exceptions for periods of malfunction be removed from GOP Numbers (b)(12)(A), (b)(13)(A), and (b)(14)(A) as they do not believe that allowing such exceptions is protective of public health and such exceptions effectively make the opacity limits in these sections unenforceable.

Response 8

The executive director has made no changes in response to this comment. The allowance of malfunctions is a federal requirement for the 10 percent opacity; however, the permit holder must continue to be in compliance with the 30 TAC Chapter 111 requirement of 30 percent opacity during this malfunction.

Comment 9

HCPHES requested that "...source is not operating for the entire quarter" be defined for portable ACIs.

Response 9

The executive director has revised GOP Number 518(b)(10)(B)(i) to clearly identify that the visible emission observation is only required when an ACI is in operation during any portion of the quarter.

Comment 10

HCPHES requested a requirement in GOP Number 518(b)(10)(D) for documentation of certification as an opacity reader.

Response 10

The executive director agrees. GOP Number 518(b)(10)(D) has been revised requiring documentation of the certification as an opacity reader be maintained at the site. This will ensure that proper certification has been obtained by the reader.

Comment 11

HCPHES requested that determination of whether acceptable operation and maintenance are being used be based on information available to the TCEQ as well as the local air pollution control agencies having jurisdiction.

Response 11

The executive director agrees. GOP Number 518(b)(11)(C)(iv) has been revised to state that determinations be based on information available to the TCEQ as well as the local air pollution control agencies having jurisdiction.

Comment 12

HCPHES requested that records made available to the TCEQ as stated in GOP Number 518(b)(11)(C)(v), (b)(12), (b)(13) and (b)(14) also be made available to local air pollution control agencies having jurisdiction.

Response 12

The executive director agrees. GOP Numbers 518(b)(11)(C)(v), (b)(12)(C)(iii), (b)(13)(C)(ii) and (b)(14)(C)(ii) have been revised to include records be made available to the local air pollution control agencies having jurisdiction.

Comment 13

HCPHES requests clarification as to whether the date of construction applies to the manufacture date of the ACI blower and manifold assembly or the start of burning operations at each new site in GOP Numbers 518(b)(12), (b)(13), and (b)(14).

Response 13

The executive director has made no changes in response to this comment. The references to the federal regulations in these terms are the titles of the subparts. Title 40 CFR Part 60 defines construction as "fabrication, erection, or installation of an affected facility." Applicability does not change due to a change in site location.

Comment 14

HCPHES requested clarification as to how GOP Numbers 518(b)(12)(A), (b)(13)(A), and (b)(14)(A) apply to portable ACIs.

Response 14

The executive director has made no changes in response to this comment. GOP Number 518 is for both permanent and temporary ACIs. The initial startup refers to the first time the ACI is ever operated, not at each location. The 180 day requirement applies after this initial startup, not after each change in location of the ACI. Regardless of the change in location of the ACI, the opacity limitation is required.