United States Environmental Protection Agency General Air Quality Permit for New or Modified Minor Sources of Air Pollution in Indian Country

http://www.epa.gov/air/tribal/tribalnsr.html

General Air Quality Permit for New or Modified Minor Source Spark Ignition Engines in Indian Country

Last Modified: July 1, 2016 Version 1.0

Information about this General Permit:

Applicability

Pursuant to the provisions of the Clean Air Act (CAA), Subchapter I, part D and 40 CFR part 49, subpart C, this permit authorizes the construction or modification, and operation of each stationary source of spark ignition (SI) reciprocating internal combustion engines for which a reviewing authority issues an Approval of the Request for Coverage (permitted source).

Eligibility

To be eligible for coverage under this General Permit, the permitted source must qualify as a minor source as defined in 40 CFR 49.152.

Request for Coverage

Requirements for submitting a Request for Coverage are contained in Section 7 of this General Permit.

Incorporation of Documents

The information contained in each reviewing authority's Approval of the Request for Coverage is hereby incorporated into this General Permit.

Termination

Section 6 of this General Permit addresses a reviewing authority's ability to revise, revoke and reissue, or terminate this General Permit. It also addresses the reviewing authority's ability to terminate an individual permitted source's Approval of the Request for Coverage under this General Permit.

Definitions

The terms used herein shall have the meaning defined in 40 CFR 49.152, unless otherwise defined in Attachment B of this permit. If a term is not defined, it shall be interpreted in accordance with normal business use.

Permit Terms and Conditions

The following applies to each permittee and permitted source with respect to only the affected emissions units and any associated air pollution control equipment listed in that permitted source's Approval of the Request for Coverage.

Section 1 - General Provisions

1. Construction and Operation

The permittee shall construct or modify and shall operate the affected emissions units and any associated air pollution control technologies in compliance with this permit and all other applicable federal air quality regulations; and in a manner consistent with representations made by the permittee in the Request for Coverage, to the extent the reviewing authority relies upon these representations in issuing the Approval of the Request for Coverage.

2. Location

This permit only authorizes the permittee to construct or modify, and to operate the permitted source in the location listed in the reviewing authority's Approval of the Request for Coverage for that permitted source.

3. Liability

This permit does not release the permittee from any liability for compliance with other applicable federal and tribal environmental laws and regulations, including the CAA.

4. Severability

The provisions of this permit are severable. If any portion of this permit is held invalid, the remaining terms and conditions of this permit shall remain valid and in force.

5. Compliance

The permittee must comply with all provisions of this permit, including emission limitations that apply to the affected emissions units at the permitted source. Noncompliance with any permit provision is a violation of the permit and may constitute a violation of the CAA; is grounds for an enforcement action; and is grounds for the reviewing authority to revoke the Approval of the Request for Coverage and terminate the permitted source's coverage under this General Permit.

6. National Ambient Air Quality Standards (NAAQS)/Prevention of Significant Deterioration (PSD) Protection
The permitted source must not cause or contribute to a NAAQS violation and, in an attainment area, must not cause or contribute to a PSD increment violation.

7. Unavailable Defense

It is not a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the provisions of this permit.

8. Property Rights

The permit does not convey any property rights of any sort or any exclusive privilege.

9. Information Requests

You, as the permittee, shall furnish to the reviewing authority, within 30 days, unless another timeframe is specified by the EPA, any information that the reviewing authority may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating coverage under the permit or to determine compliance with the permit. For any such information claimed to be confidential, the permittee must submit a claim of confidentiality in accordance with 40 CFR part 2, subpart B.

10. Inspection and Entry

Upon presentation of proper credentials, the permittee must allow a representative of the reviewing authority to:

- a. Enter upon the premises where a source is located or emissions-related activity is conducted or where records are required to be kept under the conditions of the permit;
- b. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- Inspect, during normal business hours or while the source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under the permit;
- d. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- e. Record any inspection by use of written, electronic, magnetic and photographic media.

11. Posting of Coverage

The most current Approval of the Request for Coverage for the permitted source must be posted prominently at the facility, and each affected emissions unit and any associated air pollution control technology must be labeled with the identification number listed in the Approval of the Request for Coverage for that permitted source.

12. Duty to Obtain Source-Specific Permit

If the reviewing authority intends to terminate a permitted source's coverage under this General Permit for cause as provided in Section 6 of this General Permit, then the permittee shall apply for and obtain a source-specific permit, as required by the reviewing authority.

13. Credible Evidence

For the purpose of establishing whether the permittee violated or is in violation of any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a permitted source would have been in compliance with applicable requirements if the permittee had performed the appropriate performance or compliance test or procedure.

Section 2: Emission Limitations and Standards

- 14. The permittee shall install, maintain and operate each affected emission unit, including any associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions of NSR regulated pollutants and considering the manufacturer's recommended operating procedures at all times, including periods of startup, shutdown, maintenance and malfunction. The reviewing authority will determine whether the permittee is using acceptable operating and maintenance procedures based on information available to the reviewing authority which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the permitted source.
- 15. Unless the permitted source is subject to Condition 16, the combined maximum engine power of all non-emergency SI engines at the permitted source shall be no greater than 1,800 horsepower (hp). This condition does not apply to a permitted source subject to Condition 16, as specified in the Approval of Request for Coverage.

- 16. If the Approval of Request for Coverage specifies the permitted source is subject to this condition, Condition 16, then:
 - a. The combined maximum engine power of all non-emergency natural gas engines shall not exceed 3,800 horsepower (hp); OR
 - b. Annual fuel use of all non-emergency natural gas engines shall not exceed 275 million standard cubic feet (MMscf) in any 12-month period for natural gas engines.

Permitted sources subject to this condition may comply with either Condition 16.a. or 16.b. Only permitted sources that use only natural gas in their non-emergency engines may choose to comply with this limit. The Approval of Request for Coverage shall specify as to whether the permitted source is subject to Condition 16.a. or 16.b.

- 17. The combined maximum engine power of all emergency generator engines at the permitted source shall be below 1,000 hp in attainment areas, 500 hp in ozone nonattainment areas classified as serious or lower, and there shall be no emergency generator engines in severe and extreme ozone nonattainment areas. All emergency engines must be emergency generator engines.
- 18. The combined maximum heat input of all boilers and heaters at the permitted source shall not exceed 10 million British thermal units per hour (MMBtu/hr) in attainment, unclassifiable, and attainment/unclassifiable areas; 5 MMBtu/hr in marginal, moderate, or serious ozone nonattainment areas; or 2 MMBtu/hr in severe or extreme ozone nonattainment areas.
- 19. Each affected non-emergency SI engine, excluding nonroad mobile engines, shall comply with the following limitations and standards:
 - a. The engine shall be manufactured after July 1, 2010 or January 1, 2011, as follows:
 - i. Engines greater than or equal to 500 hp shall be manufactured after July 1, 2010; and
 - ii. Engines less than 500 hp shall be manufactured after January 1, 2011.
 - b. The engine shall be certified by the manufacturer, unless stated otherwise below, to the following standards, for all pollutants, for the same model year and maximum engine power.

Type of Engine	Maximum Engine Power Rating	Emission Standard(s)
SI engines	≤25 hp	40 CFR part 1054
Gasoline or rich burn liquified petroleum gas (LPG)	≥ 500 hp	40 CFR part 1048
Gasoline or rich burn LPG	25 hp <hp<500 hp<="" td=""><td>40 CFR part 1048 (if less than 40 hp and less than 1,000 cc may instead meet part 90 and part 1054, as applicable).</td></hp<500>	40 CFR part 1048 (if less than 40 hp and less than 1,000 cc may instead meet part 90 and part 1054, as applicable).

Type of Engine	Maximum Engine	Emission Standard(s)
	Power Rating	
SI engines (except gasoline and rich burn LPG)	25 hp <hp<100 hp<="" td=""><td> Standards for field testing in 40 CFR 1048.101(c), as follows: A. The hydrocarbon (HC) and nitrogen oxides (NO_x) standard is 3.8 g/kW-hr and the carbon monoxide (CO) standard is 6.5 g/kW-hr. B. For natural gas-fueled engines you may assume HC emissions are equal to zero. C. You may apply the following formula to determine alternate emission standards that apply to your engines instead of the standards in paragraph A above: (HC+NO_x) × CO^{0.791} ≤16.78. HC+NO_x. However, emission levels may not exceed 3.8 g/kW-hr and CO emission levels may not exceed 31.0 g/kW-hr. Certification to these standards is not required. </td></hp<100>	 Standards for field testing in 40 CFR 1048.101(c), as follows: A. The hydrocarbon (HC) and nitrogen oxides (NO_x) standard is 3.8 g/kW-hr and the carbon monoxide (CO) standard is 6.5 g/kW-hr. B. For natural gas-fueled engines you may assume HC emissions are equal to zero. C. You may apply the following formula to determine alternate emission standards that apply to your engines instead of the standards in paragraph A above: (HC+NO_x) × CO^{0.791} ≤16.78. HC+NO_x. However, emission levels may not exceed 3.8 g/kW-hr and CO emission levels may not exceed 31.0 g/kW-hr. Certification to these standards is not required.
SI engines (except gasoline and rich burn LPG)	≥100 hp	Standards listed below in Condition 17.b.i. Certification to these standards is not required. The permittee may choose to comply with the emission limits in units of either g/hp-hr or ppm _{vd} at 15% O ₂ .

i. Standards for SI engines (except gasoline and rich burn LPG) greater than or equal to 100 hp.

	Maximum Engine Power	Manufacture Date	Emission Standards					
Engine and Fuel Type			g/hp-hr			ppmvd at 15% O ₂		
			NO _x	СО	voc	NOx	со	voc
Non-Emergency SI Natural Gas	100≤hp<500	7/1/2008	2	4	1	160	540	86
and Non- Emergency SI Lean Burn LPG		1/1/2011	1	2	0.7	82	270	60
Non-Emergency SI Lean Burn	500≤hp<1,3	1/1/2008	2	4	1	160	540	86
Natural Gas and LPG		7/1/2010	1	2	0.7	82	270	60
Non-Emergency SI Natural Gas and Non- Emergency SI Lean Burn LPG (except lean burn 500≤HP<1,350)	hp≥500	7/1/2007	2	4	1	160	540	86
	hp≥500	7/1/2010	1	2	0.7	82	270	60

	Maximum Engine Power	Manufacture Date	Emission Standards					
Engine and Fuel Type			g/hp-hr			ppmvd at 15% O ₂		
			NO _x	СО	voc	NO _x	СО	voc
Landfill/Digester Gas (except lean burn 500≤HP<1,350)	hp<500	7/1/2008	3	5	1	220	610	80
		1/1/2011	2	5	1	150	610	80
	hp≥500	7/1/2007	3	5	1	220	610	80
		7/1/2010	2	5	1	150	610	80
Landfill/Digester Gas Lean Burn	500≤hp<1,3 50	1/1/2008	3	5	1	220	610	80
		7/1/2010	2	5	1	150	610	80

- c. The permittee must operate and maintain each engine certified by the manufacturer, and any associated control device, according to the manufacturer's emission-related written instructions.
- 20. Each natural gas-fired engine may be operated using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations.

Section 3: Monitoring and Testing Requirements

21. The permittee shall monitor fuel use for each engine each calendar month.

22. Air-to-Fuel Ratio Controller

For each engine equipped with an air-to-fuel (AFR) ratio controller, the AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

23. Engines Not Certified by the Manufacturer

For each engine required to meet the standards in Condition 19.b., but that is not certified by the manufacturer to the applicable standards, and is not required to be certified by the manufacturer, the permittee shall:

- a. For an engine greater than 25 hp and less than or equal to 500 hp, conduct an initial performance test as follows:
 - Within 60 days after achieving the maximum production rate at which the permitted source will
 operate, but not later than 180 days after the first day of operation after issuance of the Approval of the
 Request for Coverage;
 - ii. The test shall verify compliance with the applicable emission limitations in Conditions 19.b.;
 - iii. According to a test plan approved by the reviewing authority;
 - iv. While the permitted source is operating under typical operating conditions;
 - v. With at least three test runs, each of at least 1 hour duration;
 - vi. Within 10 percent of peak load for the engine;
 - vii. Using test methods from 40 CFR part 60, Appendix A unless alternative methods are approved by the reviewing authority in writing in advance of the test; and
 - viii. Simultaneously for CO and NO_x whenever either one needs to be tested.
- b. For an engine greater than 500 hp, conduct an initial performance test and subsequent performance testing every 8,760 hours of operation or 3 years, whichever comes first as follows:

- i. The performance tests shall verify compliance with the applicable emission limitations in Conditions 19.b; and
- ii. The performance tests shall be performed according to Condition 23.a.iii. through viii.

The permitted source may substitute the results of the most recent performance test performed on the engine(s) in lieu of conducting the performance test for engines required above, provided that the most recent performance test was conducted within two years of the first day of operation after the Approval of Request for Coverage is issued by the reviewing authority, and, was conducted according to the requirements in Conditions 23.a.-b. above.

Section 4: Recordkeeping Requirements

- 24. The permittee shall maintain all records required to be kept onsite by this permit for at least five years from the date of origin, unless otherwise stated.
- 25. The permittee shall maintain onsite records of propane use in all natural gas-fired engines.
- 26. The permit application and all documentation supporting that application shall be maintained by the permittee for the duration of time the affected emissions units are covered under this permit.
- 27. For each engine, the permittee shall maintain records of:
 - a. The amount of fuel used each month for each engine (in gallons or million standard cubic feet, as appropriate);
 - b. If subject to Condition 16.b, the 12-month rolling total of fuel used. The 12-month rolling total is calculated each month by adding the current month's fuel use to the previous 11 months of fuel use.
 - c. For each engine required to be certified or using certification, documentation from the manufacturer that each engine is certified to the applicable standards;
 - d. The maintenance plan for each engine; and
 - e. All maintenance activities conducted for each engine on a monthly basis.
- 28. The results of each performance test conducted pursuant to Condition 23 shall be recorded. At a minimum, the permittee shall maintain records of:
 - a. The date of each test;
 - b. Each test plan;
 - c. Any documentation required to approve an alternate test method;
 - d. Conditions during the test, including the engine power rating;
 - e. The results of each test; and
 - f. The name of the company or entity conducting the analysis.

Section 5: Notification and Reporting Requirements

29. Notification of Construction or Modification, and Operations

The permittee shall submit a written or electronic notice to the reviewing authority within 30 days from when the permittee begins actual construction or modification, and within 30 days from when the permittee begins initial operations or resumes operation after a modification.

30. Notification of Change in Ownership or Operator

If the permitted source changes ownership or operator, then the new owner or operator must submit a written or electronic notice to the reviewing authority within 90 days after the change in ownership or operator is effective. In the report, the new permittee must provide the reviewing authority a written agreement containing a specific date for transfer of ownership or operator, and an effective date on which the new owner or operator assumes partial and/ or full coverage and liability under this permit. The submittal must identify the previous owner or operator, and update the name, street address, mailing address, contact information, and any other information about the source if it would change as a result of the change of ownership or operator. The current owner or operator shall ensure that the permitted source remains in compliance with the General Permit until any such transfer of ownership or operator is effective.

31. Notification of Closure

The permittee must submit a report of any permanent or indefinite closure to the reviewing authority in writing within 90 days after the cessation of all operations at the permitted source. The notification must identify the owner, the current location, and the last operating location of the permitted source. It is not necessary to submit a report of closure for regular, seasonal closures.

32. Annual Reports

The permittee shall submit an annual report on or before March 15 of each year to the reviewing authority. The annual report shall cover the period from January 1 to December 31 of the previous year and shall include:

- a. An evaluation of the permitted source's compliance status with the requirements of Section 2 during the calendar year;
- b. Summaries of the required monitoring, testing and recordkeeping in Sections 3 and 4; and
- c. Summaries of deviation reports submitted pursuant to Condition 33.

33. Deviation Reports

The permittee shall promptly report to the reviewing authority any deviations as defined at 40 CFR 71.6(a)(3)(iii)(C) from permit requirements including deviations attributable to upset conditions. Deviation reports shall include:

- a. Identity of the affected emissions unit(s) where the deviation occurred;
- b. Nature of the deviation;
- c. Length of time of the deviation;
- d. Probable cause of the deviation; and
- e. Any corrective actions or preventive measures taken as a result of the deviation to minimize emissions from the deviation and to prevent future deviations.
- f. For the purposes of this permit, *promptly* shall be defined to mean within 30 days after the month in which the permittee discovered the deviation.

34. Performance Test Reports

The permittee shall submit a test report to the reviewing authority within 60 days after the completion of any required performance test. At a minimum, the test report shall include:

- a. A description of the affected emissions unit and sampling location(s);
- b. The time and date of each test;
- c. A summary of test results, reported in units consistent with the applicable standard;
- d. A description of the test methods and quality assurance procedures used;
- e. A summary of any deviations from the proposed test plan and justification for why the deviation(s) was necessary;
- f. The amount and type of fuel burned, raw material consumed, and product produced, as applicable, during each test run;
- g. Operating parameters of the affected emissions units and control equipment during each test run;

- h. Sample calculations of equations used to determine test results in the appropriate units; and
- i. The name of the company or entity performing the analysis.

35. Reporting and Notification Address

The permittee shall send all required reports to the reviewing authority at the mailing address specified in the Approval of the Request for Coverage.

36. Signature Verifying Truth, Accuracy, and Completeness

All reports required by this permit shall be signed by a responsible official as to the truth, accuracy, and completeness of the information. The report must state that, based on information and belief formed after reasonable inquiry, the statements and information are true, accurate, and complete. If the permittee discovers that any reports or notification submitted to the reviewing authority contain false, inaccurate, or incomplete information, the permittee shall notify the reviewing authority immediately and correct or amend the report as soon as is practicable.

Section 6: Changes to this General Permit

37. Revising, Reopening, Revoking and Reissuing, or Terminating for Cause

The General Permit may be revised, reopened, revoked and reissued or terminated for cause. The filing of a request by you, the permittee, for a permit revision, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. This provision also applies to the documents incorporated by reference.

38. Terminating Coverage under this Permit

The reviewing authority may terminate a previously issued Approval of the Request for Coverage, and thereby terminate that permittee's authorization to construct or modify, and that permitted source's authorization to operate under this General Permit for cause as defined in Attachment B. The reviewing authority may provide the permittee with notice of the intent to terminate, and delay the effective date of the termination to allow the permittee to obtain a source-specific permit as required by the reviewing authority.

39. Change in Ownership or Operator

If the permitted source changes ownership or operator, the reviewing authority may change the Approval of the Request for Coverage to reflect the new ownership or operator in accordance with the administrative amendment provisions in 40 CFR 49.159(f).

40. Permit Becomes Invalid

Authority to construct and operate under this permit becomes invalid if the permittee does not commence construction within 18 months after the effective date of the request for coverage under a general permit, if the permittee discontinues construction for a period of 18 months or more, or if the permittee does not complete construction within a reasonable time. The reviewing authority may extend the 18-month period upon a satisfactory showing that an extension is justified, according to 40 CFR 49.156(e)(8).

Section 7: Obtaining Coverage under this General Permit

41. To obtain coverage under this General Permit, an applicant must submit a Request for Coverage to the appropriate reviewing authority for the area in which the permitted source is or will be located (the Request for Coverage Form can be found at: http://www.epa.gov/air/tribal/tribalnsr.html). Attachment C contains a list of reviewing authorities and their area of coverage.

Attachment A: Abbreviations and Acronyms

ASTM American Society for Testing and Materials

CAA Federal Clean Air Act

CFR Code of Federal Regulations

CO carbon monoxide CO₂ carbon dioxide

EPA United States Environmental Protection Agency

hp horsepower

LPG liquefied petroleum gas

NAAQS National ambient air quality standards

NO_X nitrogen oxides, except N₂O

NSR new source review

PSD Prevention of Significant Deterioration

VOC volatile organic compounds

SI spark ignition

scf standard cubic feet

Attachment B: Definitions

For the purposes of this General Permit:

2-stroke engine means a type of engine which completes the power cycle in single crankshaft revolutions by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

4-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Approval of the Request for Coverage means a reviewing authority's letter granting an applicant's request for construction or modification, and operation of a true minor source under the terms and conditions of this General Permit.

Biodiesel means a combustion fuel made from fatty acids of methyl esters that complies with the specifications of ASTM 6751.

Cause means with respect to the reviewing authority's ability to terminate a permitted source's coverage under a permit that:

- 1. The permittee is not in compliance with the provisions of this General Permit;
- The reviewing authority determines that the emissions resulting from the construction or modification of the
 permitted source significantly contribute to NAAQS violations, which are not adequately addressed by the
 requirements in this General Permit;
- 3. The reviewing authority has reasonable cause to believe that the permittee obtained Approval of the Request for Coverage by fraud or misrepresentation; or
- 4. The permittee failed to disclose a material fact required by the Request for Coverage or the regulations applicable to the permitted source of which the applicant had or should have had knowledge at the time the permittee submitted the Request for Coverage.

Certified means, with respect to an engine, an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in 40 CFR parts 60, 89, 90, 1039, 1048, or 1054, as appropriate.

Compression ignition means relating to a type of stationary internal combustion engine that is not a SI engine and are typically diesel engines where the heat generated from compression is enough to initiate the combustion process, without needing any external spark.

Construction means any physical change or change in the method of operation including fabrication, erection, installation, demolition, or modification of an emission unit that would result in a change of emissions.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and carbon dioxide (CO₂).

Distillate fuel means fuel oils, including recycled oils that comply with the specifications for fuel oil numbers 1 and 2, as defined by ASTM 396, or equivalent.

Emergency engine means an engine that is operated to provide electrical power or mechanical work during an emergency situation. Examples include engines used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or an engine used to pump water in the case of fire, flood, or other event.

Emergency generator engine means an emergency engine that is designed solely for the purpose of providing electrical power during power outages.

Lean burn engine means any two-stroke or four-stroke SI engine that does not meet the definition of a rich burn engine.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining or natural gas production.

Non-selective catalytic reduction means an add-on catalytic NO_X control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_X , CO, and VOC into CO_2 , nitrogen, and water.

Oxidation catalyst means an add-on catalytic control device that controls CO and volatile organic compounds (VOC) by oxidation.

Permittee means the owner or operator of a permitted source.

Permitted source means each spark ignition engine for which a reviewing authority issues an Approval of the Request for Coverage.

Request for Coverage means a permit application that contains all the information required in the standard application form

Responsible official means one of the following:

- 1. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is directly responsible for the overall operation of the permitted source.
- 2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
- For a public agency: Either a principal executive officer or ranking elected official, such as a chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_X (such as pre-combustion chambers), will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

SI engine is either a gasoline-fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Spark ignition engines are dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically

natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis.

Standard cubic foot means a measure of the quantity of a gas equal to a cubic foot of volume at a temperature of 68°F and a pressure of 29.92 inches mercury.

Attachment C – List of the EPA Reviewing Authorities and Areas of Coverage

EPA	Address for Request for	Address for All Other	Area Covered	Phone
Region	Coverage	Notifications and Reports		Number
Region I	EPA New England 5 Post Office Square, Suite 100 Mail Code OEP05-2 Boston, MA 02109-3912	EPA New England 5 Post Office Square, Suite 100 Mail Code OES04-2 Boston, MA 02109-3912	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont	888- 372-7341, 617-918-1111
Region II	Chief, Air Programs Branch Clean Air and Sustainability Division EPA Region 2 290 Broadway, 25 th Floor New York, NY 10007-1866	Chief, Air Compliance Branch Division of Enforcement and Compliance Assistance EPA Region 2 290 Broadway, 21 st Floor New York, NY 10007-1866	New Jersey, New York, Puerto Rico, and Virgin Islands	877-251-4575
Region III	Office of Permits and Air Toxics 3AP10 EPA Region 3 1650 Arch Street Philadelphia, PA 19103	Office of Air Enforcement and Compliance Assurance 3AP20 EPA Region 3 1650 Arch Street Philadelphia, PA 19103	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia	800-438-2474, 215-814-5000
Region IV	Chief, Air Permits Section EPA Region 4 APTMD 61 Forsyth Street Atlanta, GA 30303	Chief, Air & EPCRA Enforcement Branch EPA Region 4 APTMD 61 Forsyth Street, SW Atlanta, GA 30303	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee	800-241-1754, 404-562-9000
Region V	Air Permits Section Air Programs Branch (AR-18J) EPA Region 5 77 West Jackson Blvd Chicago, Illinois 60604	Air Enforcement and Compliance Assurance Branch (AE-17J) Air and Radiation Division EPA Region 5 77 West Jackson Blvd Chicago, Illinois 60604	Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin	800-621-8431, 312-353-2000
Region VI	Multimedia Planning and Permitting Division EPA Region 6 1445 Ross Avenue (6PD-R) Dallas, TX 75202	Compliance and Enforcement Correspondence: Compliance Assurance and Enforcement Division EPA Region 6 1445 Ross Avenue (6EN) Dallas, TX 75202	Arkansas, Louisiana, New Mexico, Oklahoma, and Texas	800-887-6063, 214-665-2760

Address for Request for	Address for All Other	Area Covered	Phone	
Coverage	Notifications and Reports		Number	
Chief, Air Permitting &	Chief, Air Permitting &	Iowa, Kansas,	800-223-0425,	
Compliance Branch	Compliance Branch	Missouri, and	913-551-7003	
EPA Region 7	EPA Region 7	Nebraska		
11201 Renner Blvd	11201 Renner Blvd			
Lenexa, KS 66219	Lenexa, KS 66219			
U.S. Environmental Protection	U.S. Environmental Protection	Colorado,	800-227-8917,	
Agency, Region 8	Agency, Region 8	Montana, North	303-312-6312	
Office of Partnerships and	Office of Enforcement,	Dakota, South		
Regulatory Assistance	Compliance & Environmental	Dakota, Utah,		
Tribal Air Permitting Program,	Justice	and Wyoming		
8P-AR	Air Toxics and Technical			
1595 Wynkoop Street	Enforcement Program, 8ENF-AT			
Denver, Colorado 80202	1595 Wynkoop Street			
	Denver, Colorado 80202			
Chief, Permits Office (Air-3)	Enforcement Division Director	American	866-EPA-9378,	
Air Division	Attn: Air & TRI Section (ENF-2-1)	Samoa, Arizona,	415-947-8000	
EPA Region 9	EPA Region 9	California,		
75 Hawthorne St	75 Hawthorne St	Guam, Hawaii,		
San Francisco, CA 94105	San Francisco, CA 94105	Navajo Nation		
		Nevada, and		
		Northern		
		Mariana Islands		
Tribal Air Permits Coordinator	Tribal Air Permits Coordinator	Alaska, Idaho,	800-424-4372,	
U.S. EPA, Region 10, AWT-150	U.S. EPA, Region 10, AWT-150	Oregon, and	206-553-1200	
1200 Sixth Avenue, Suite 900	1200 Sixth Avenue, Suite 900	Washington		
Seattle, WA 98101	Seattle, WA 98101			
	Chief, Air Permitting & Compliance Branch EPA Region 7 11201 Renner Blvd Lenexa, KS 66219 U.S. Environmental Protection Agency, Region 8 Office of Partnerships and Regulatory Assistance Tribal Air Permitting Program, 8P-AR 1595 Wynkoop Street Denver, Colorado 80202 Chief, Permits Office (Air-3) Air Division EPA Region 9 75 Hawthorne St San Francisco, CA 94105 Tribal Air Permits Coordinator U.S. EPA, Region 10, AWT-150 1200 Sixth Avenue, Suite 900	Chief, Air Permitting & Chief, Air Permitting & Compliance Branch EPA Region 7 11201 Renner Blvd Lenexa, KS 66219 U.S. Environmental Protection Agency, Region 8 Office of Partnerships and Regulatory Assistance Tribal Air Permitting Program, 8P-AR Denver, Colorado 80202 Chief, Permits Office (Air-3) Air Division EPA Region 9 75 Hawthorne St San Francisco, CA 94105 Chief, Air Permitting & Compliance Branch EPA Region 7 11201 Renner Blvd Lenexa, KS 66219 U.S. Environmental Protection Agency, Region 8 Office of Enforcement, Compliance & Environmental Justice Air Toxics and Technical Enforcement Program, 8ENF-AT 1595 Wynkoop Street Denver, Colorado 80202 Chief, Permits Office (Air-3) Air Division EPA Region 9 75 Hawthorne St San Francisco, CA 94105 Tribal Air Permits Coordinator U.S. EPA, Region 10, AWT-150 1200 Sixth Avenue, Suite 900	Coverage Chief, Air Permitting & Chief, Air Permitting & Compliance Branch EPA Region 7 11201 Renner Blvd Lenexa, KS 66219 U.S. Environmental Protection Agency, Region 8 Office of Partnerships and Regulatory Assistance Tribal Air Permitting Program, 8P-AR Denver, Colorado 80202 Chief, Permits Office (Air-3) Air Division EPA Region 9 75 Hawthorne St San Francisco, CA 94105 Chief, Air Permitting & Cowa, Kansas, Missouri, and Nebraska Iowa, Kansas, Missouri, and Nebraska Ivisouri, and Wyoring Agency, Region 8 Office of Enforcement, Compliance & Environmental Justice Air Toxics and Technical Enforcement Program, 8ENF-AT 1595 Wynkoop Street Denver, Colorado 80202 Enforcement Division Director Attn: Air & TRI Section (ENF-2-1) EPA Region 9 75 Hawthorne St San Francisco, CA 94105 San Francisco, CA 94105 Navajo Nation Nevada, and Northern Mariana Islands Tribal Air Permits Coordinator U.S. EPA, Region 10, AWT-150 1200 Sixth Avenue, Suite 900 Washington	