

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

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

# Questionnaire for Requesting Coverage under the General Air Quality Permit for New or Modified Minor Source Spark Ignition Engines in Indian Country

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### Does the General Permit apply to my facility?

This questionnaire is intended to help you, the facility owner or operator, determine your eligibility for the General Air Quality Permit for New or Modified Minor Source Spark Ignition Engines in Indian Country. You are not required to complete this questionnaire and this questionnaire is not necessary to apply for the General Air Quality Permit for New or Modified Minor Source Spark Ignition Engines. This questionnaire does not cover all of the General Air Quality Permit requirements and does not guarantee approval of a minor source preconstruction permit under this program. This General Air Quality Permit is available to true minor and synthetic minor sources of regulated New Source Review (NSR) pollutants.

## **About this Questionnaire**

The questions focus on general information pertaining to your existing or future engines. The questionnaire is not meant to be exhaustive and only requires knowledge of basic facility information, including the maximum capacity of the units and the type of units being employed.

The U.S. Environmental Protection Agency (EPA) is making two engine general permits available:

• One general permit is for facilities that have non-emergency *compression ignition* internal combustion engines and one is for facilities that have non-emergency *spark ignition* internal combustion engines.

The engine general permits are intended for sources that consist primarily of non-emergency engines used for power generation (e.g., to produce electrical power or pump water). The engine general permits were *not* developed to apply to engines that are a part of a larger source category, such as the oil and gas industry or the other source categories for which EPA has developed general permits or permits by rule. These source categories are not prohibited from applying for the engine general permits, but may find other permitting options are available that provide greater flexibility.

If you have both compression ignition AND spark ignition non-emergency engines present at your facility, then you are not eligible for this permit and should consult your reviewing authority about seeking a site-specific permit.

In addition to non-emergency engines, the engine general permits can accommodate exempt emergency generator engines of either type that may be present at your facility. If you also have boilers at your facility in addition to emergency engines, you should consider the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines in Indian Country (see the questionnaire for boilers and emergency engines). If you have a minor source of *spark ignition* non-emergency engines, see the questionnaire for spark ignition engines. See the table on the following page for additional guidance.

The engines general permits are not intended to cover engines in the oil and natural gas production and natural gas processing segments of the oil and natural gas sector.

#### **Description of Engines**

Engines included in this source category are stationary internal combustion engines (ICE) – spark ignition and compression ignition – that convert heat energy into mechanical work and are not mobile. This source category does not include combustion turbines or nonroad engines (mobile ICE) such as forklifts, off-highway mobile cranes, bulldozers,

and lawnmowers. Stationary ICE includes reciprocating ICE, rotary ICE, and other ICE, except combustion turbines as noted above. This category covers both non-emergency and emergency generator stationary ICE. Stationary engines include (1) nonroad engines that are portable or transportable and that remain at a single location for 12 months or longer and (2) nonroad engines that are located at seasonal sources and operate during the annual operating season for the source.

The following table provides a matrix of which general permit is appropriate for different engine and boiler configurations:

	Corresponding General Permit Options		
Equipment Covered by a General Permit:	Boilers and Emergency Engines	Compression Ignition Engines	Spark Ignition Engines
Combination of Non-Emergency (Prime) Compression Ignition AND Spark Ignition Engines	General Permit Not Available – Apply for Site-Specific Permit		
Non-Emergency (Prime) Compression Ignition Engines		Х	
Non-Emergency (Prime) Spark Ignition Engines			X
Exempt Emergency Generator Engines <sup>a</sup>	Х	Х	Х
Exempt Boilers and Heaters <sup>b</sup>	Х	Х	Х
Emergency Engines, Boilers and/or Heaters that are Not Exempt <sup>a,b</sup>	Х°		

<sup>&</sup>lt;sup>a</sup>Emergency engines at a single source are 'exempt' if the <u>combined</u> maximum horsepower (hp) rating is below 1,000 hp in attainment areas or 500 hp in ozone nonattainment areas classified as serious or lower. If your source consists of only exempt equipment, then you are not required to obtain a minor NSR permit.

<sup>b</sup>Boilers and heaters at a single source are 'exempt' if the <u>combined</u> maximum heat input rating is less than: 10 million British thermal units per hour (MMBtu/hr) in attainment areas; 5 MMBtu/hr in marginal, moderate, or serious ozone nonattainment areas; and 2 MMBtu/hr in severe or extreme ozone nonattainment areas. If your source consists of only exempt equipment, then you are not required to obtain a minor NSR permit.

<sup>c</sup>Some sources may need site-specific permits depending on equipment size.

#### You should continue with this Questionnaire if you meet all of the following criteria:

- You plan to construct a new true or synthetic minor source of engines OR plan to modify the operations at an existing minor source engine;
- You are not planning to construct or modify a major source of spark ignition engines;
- Your new or modified minor source engine is located within Indian country;
- You do not know whether your facility needs a permit, or if you do not know the attainment status of your area and you want to find out whether or not you should apply for the General Permit for an engine; and
- You intend to satisfy the processes that the EPA has made available in the application documents for this General Permit to address threatened and endangered species and historic properties under the Endangered Species Act and the National Historic Preservation Act, respectively.

#### **More Information**

The definition of a "modification" and "potential to emit" (PTE) can be found at 40 CFR 49.152(d) and in the "Instructions" document. Additional information on the applicability of the Federal Indian Country Minor NSR rule can be found at 40 CFR 49.153.

Information on the air quality attainment status of the area where your facility is located can be found at: <a href="http://www.epa.gov/airquality/greenbook/">http://www.epa.gov/airquality/greenbook/</a>. You may also contact your reviewing authority for information on your attainment status.

Information on any available voluntary consensus standards that can be used as alternatives to the emissions measurement standards in the General Air Quality Permit for New or Modified Minor Source Spark Ignition Engines can be found in: "Voluntary Consensus Standard Results for General Permits and Permits by Rule for the Indian Country Minor New Source Review Program; 40 CFR Part 49, Subparts 156(c) and 162," memorandum from Robin Segall, Acting Group Leader, Measurement Technology Group, to Laura McKelvey, Community and Tribal Programs Group, February 7, 2014, <a href="http://www.epa.gov/air/tribal/tribalnsr.html">http://www.epa.gov/air/tribal/tribalnsr.html</a>.

Sources eligible for the General Permit for New or Modified Minor Source Spark Ignition Engines may also be subject to federal standards under NSPS, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines; 40 CFR 90 – Control of Emissions from Nonroad Spark-Ignition Engines at or Below 19 Kilowatts; 40 CFR 1048— Control of Emissions from New, Large Nonroad Spark-Ignition Engines; and 40 CFR 1054 – Control of Emissions from New, Small Nonroad Spark-Ignition Engines and Equipment. The conditions applicable to sources seeking coverage under this General Permit are intended to be generally consistent with the requirements in these regulations; however, compliance with the applicable requirements is required independent of the conditions in the General Permit, and not all requirements applicable under Subparts JJJJ and 40 CFR 90, 1048 and 1054 are necessarily included in the General Permit. The Background Document for the General Permit identifies the specific requirements in these provisions that are intended to be included in the General Permit.

Please contact your reviewing authority if you have questions or need assistance. A list of reviewing authorities, their areas of coverage, and contact information can be found in Attachment C to the General Air Quality Permit for New or Modified Minor Source Spark Ignition Engines or by visiting: http://www.epa.gov/air/tribal/tribalnsr.html.

## **Questionnaire for Spark Ignition Engines**

## Part 1: Do my Engines Need or Qualify for a Minor Source Permit?

The following questions are meant to determine whether or not your engines need or qualify for this General Permit.

1.	Will the PTE of your facility be less than 250 tons per year (tpy) for particulate matter (PM, PM <sub>10</sub> , or PM <sub>2.5</sub> ),
	volatile organic compound (VOC), nitrogen oxides (NO <sub>X</sub> ), carbon monoxide (CO), and sulfur dioxide (SO <sub>2</sub> ), each
	individually? The emissions from your facility may be calculated using the PTE calculator provided at
	http://www.epa.gov/air/tribal/tribalnsr.html. Be sure to include all existing, new, and modified emission units
	at your facility. Do not include mobile engines or engines that remain in one location for less than 12 months.

Yes No

If you answered 'No,' your source does not qualify for the General Permit, please contact your reviewing authority to apply for a site-specific permit. If you answered 'Yes,' continue on to the next question. A synthetic minor source that agrees to the enforceable conditions in the General Permit and is below the threshold above should answer 'Yes.'

2. Will the PTE of your new facility or the increase in potential emissions from your modified existing facility be equal to or above the applicable minor NSR thresholds listed below for ANY of the pollutants listed in the table below? The potential emissions from your facility may be calculated using the PTE calculator provided at <a href="http://www.epa.gov/air/tribal/tribalnsr.html">http://www.epa.gov/air/tribal/tribalnsr.html</a>. Be sure to include all new and modified emission units at your facility. Do not include mobile engines or engines that remain in one location for less than 12 months.

Pollutant	Attainment Area	Nonattainment Area
СО	10 tpy	5 tpy
PM	10 tpy	5 tpy
PM <sub>10</sub>	5 tpy	1 tpy
PM <sub>2.5</sub>	3 tpy	0.6 tpy
SO <sub>2</sub>	10 tpy	5 tpy
NO <sub>X</sub>	10 tpy	5 tpy
VOC	5 tpy	2 tpy

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Yes	No

If you answered **'No,'** your source is exempt from the minor NSR program. Please contact your reviewing authority to confirm that your facility will not need a permit. If you answered **'Yes,'** continue on to the next question.

3.	Is your facil	ity located in a seri	ous CO nonattainment area?		
			Yes No	0	
1	authority to	apply for a site-sp	urce does not qualify for this General ecific permit. If you answered 'No,' o	continue on to the next question.	wing
4. If located in a nonattainment area for any pollutant, will the PTE of your facility for the particular nonattainment pollutant be less than the NSR major source thresholds specified in the table below ( on nonattainment classification)? Be sure to include all existing, new, and modified emission units. Described include mobile engines or engines that remain in one location for less than 12 months.					
		Pollutant	Nonattainment Classification	NSR Major Source Threshold	
		Ozone	Marginal	100 tpy of VOC or NO <sub>X</sub>	
			Moderate	100 tpy of VOC or NO <sub>X</sub>	
			Serious	50 tpy of VOC or NO <sub>X</sub>	
			Severe	25 tpy of VOC or NO <sub>X</sub>	
			Extreme	10 tpy of VOC or NO <sub>X</sub>	
		PM <sub>10</sub>	Moderate	100 tpy	
			Serious	70 tpy	
		СО	Moderate	100 tpy	
			Serious	50 tpy	
		SO <sub>2</sub> , NO <sub>2</sub> , PM <sub>2.5</sub>	No nonattainment classification	100 tpy	
			Yes No Not	: Applicable	
	If you ansy	vered <b>'No.'</b> vour so	urce does not qualify for the Genera	l Permit, please contact your revie	wing
	-		pecific permit. If you answered <b>'Yes,'</b>		······································
		•	inor source that agrees to the enforc	ceable conditions in the General Pe	rmit
	and is belo	w the thresholds a	bove should answer 'Yes.'		
Pa	rt 2: What	types of facilitie	es DO NOT Qualify for Coverag	ge under this General Air Ou	ality Permit
			ource Spark Ignition Engines		
			determine whether or not your eng		from
			uality Permit for New or Modified Mi	•	
1.	•	nd to install non-er or existing source	mergency compression ignition engir?	nes (e.g. engines that burn diesel o	r biodiesel)
			Yes No Not	Applicable	
	-	· ·	nestion, your facility may qualify for c urce Spark Ignition Engines, and shou	_	-

If you answered 'Yes' to this question, your facility likely does not qualify for coverage under the General Air Quality Permit for New or Modified Minor Source Spark Ignition Engines and you should consider whether you quality for the General Air Quality Permit for Compression Ignition Engines. If you have both non-emergency spark ignition engines and non-emergency compression ignition engines, then you must obtain a site-specific permit. Please contact your reviewing authority to confirm that your facility will not qualify for this permit.

# Part 3: Do My Engines Qualify for Coverage under the General Air Quality Permit for New or Modified Minor Source Spark Ignition Engines?

The following questions are meant to determine whether or not your source of engines would qualify for coverage under the General Air Quality Permit for New or Modified Minor Source Spark Ignition Engines.

1.	After completion, will your new or modified source have emergency generator engines with a combined maximum engine power that is below 1,000 hp, if in an attainment area, 500 hp, if in an ozone nonattainment area, or no emergency generator engines in a severe and extreme ozone nonattainment areas? (All emergency engines must be emergency generator engines used solely for supplying electrical power during power outages.)
	☐ Yes ☐ No
2.	After completion, will your new or modified source have boilers and heaters that have a combined maximum heat input capacity of less than: 10 MMBtu/hr in attainment, unclassifiable or 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?
	☐ Yes ☐ No
3.	After completion, will your new or modified source have only SI non-emergency (prime power) engines? That is, is your new or modified source does not have any non-emergency engines that use diesel or biodiesel.
	☐ Yes ☐ No
4.	<ul> <li>After completion will the non-emergency (prime power) SI engines meet one of the following criteria?</li> <li>a. The non-emergency SI engines only burn natural gas and (1) the combined maximum engine power is less than 3,800 hp OR (2) will use less than 275 million standard cubic feet of natural gas per year (for synthetic minor sources). (One hundred hours of propane use is allowed in emergency situations.)</li> <li>b. The non-emergency SI engines burn multiple fuels or fuels other than natural gas and have a combined maximum engine power less than 1,800 hp.</li> </ul>
	☐ Yes ☐ No
5.	After completion, will each newly installed non-emergency engines that is less than 500 hp be manufactured on or after January 1, 2011?
	Yes No Not applicable
6.	After completion, will each newly installed non-emergency engines greater than or equal to 500 hp be manufactured on or after July 1, 2010?
	Yes No Not applicable

7.	Do you intend to satisfy the procedures for threatened or endangered species and historic properties according to the processes provided by the EPA for this General Permit?
	☐ Yes ☐ No
If y Ge ans	nclusion ou answered 'Yes' or 'Not Applicable' to each question in Part 3, your facility may qualify for coverage under the neral Air Quality Permit for New or Modified Minor Source Spark Ignition Engines. If you believe based upon your swers in this questionnaire that your new or modified engine qualifies for the General Air Quality Permit for New Modified Minor Source Spark Ignition Engines, please submit a Request for Coverage Form to your reviewing thority to obtain a permit application.
	ou answered 'No' to any of these questions, your facility may not qualify for coverage under the General Air ality Permit for New or Modified Minor Source Spark Ignition Engines. Please contact your reviewing authority to

confirm that your facility will not qualify for this General Permit.

Questionnaire: Spark Ignition Engines Version 1.0