

# 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

# Questionnaire for Requesting Coverage under the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency 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 whether or not you are eligible for the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines. You are not required to complete it and this questionnaire is not necessary to apply for the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency 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. This source category includes stationary sources with boilers, process heaters and emergency engines.

# **Description of Boilers and Emergency Engines**

A boiler means an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water. Emergency stationary internal combustion engines include any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance.

# **About this Questionnaire**

The questions focus on general information pertaining to your existing or future boilers, process heaters and emergency engines. The questionnaire is not meant to be exhaustive and only requires knowledge of basic facility information, including heat input capacity.

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

- You plan to construct an entirely new true or synthetic minor source boiler and/or emergency engine OR
  plan to modify the operations at an existing minor source boiler and/or emergency engine;
- You are not planning to construct or modify a major source boiler or emergency engine;
- Your new or modified minor source boiler and/or emergency 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 a boiler and/or emergency engine; and
- You intend to satisfy the processes that the U.S. Environmental Protection Agency (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 Boilers and Emergency

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

Sources eligible for the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines may also be subject to federal standards under 40 CFR Part 60, Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units; 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units; 40 CFR Part 63, Subpart JJJJJ - NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources; 40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines; 40 CFR 63, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines; and 40 CFR 63 Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines. 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 Db, Dc, JJJJJJ, IIII, JJJJ and ZZZZ are necessarily included in the General Permit. The Background Document for the General Permit identifies the specific requirements in these Subparts 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 Boilers and Emergency Engines or by visiting: <a href="http://www.epa.gov/air/tribal/tribalnsr.html">http://www.epa.gov/air/tribal/tribalnsr.html</a>

# **Questionnaire for Boilers**

#### Part 1: Does my Boiler Need or Qualify for a Minor Source Permit?

The following questions are meant to determine whether or not your boiler and/or emergency engine needs or qualifies 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 compounds (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 <a href="http://www.epa.gov/air/tribal/tribalnsr.html">http://www.epa.gov/air/tribal/tribalnsr.html</a> . Be sure to include all existing, new, and modified emission units at your facility.		
	☐ Yes ☐ No		
	If you answered 'No,' you do 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.'		

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2.	Will your facility be a minor source of HAP? If the PTE of your facility will be less than 10 tons per year for a single HAP and less than 25 tons per year for any combination of HAPs, your source is a minor source of HAPs. The 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 existing, new, and modified emission units at your facility.	
	☐ Yes ☐ No	
	If you answered 'No,' your source does not qualify for the minor NSR program. Please contact your reviewing authority to apply for a site-specific permit. If you answered 'Yes,' continue on to the next question.	

3. 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.

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

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.

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 (based on nonattainment classification)? The 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 existing, new, and modified emission units at your facility.

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>

	Pollutant	Nonattainment Classification	NSR Major Source Threshold
		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 Ap	pplicable
	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 Part 2 of this Questionnaire. A synthetic minor source that agrees to the enforceable conditions in the General Permit and is below the thresholds above should answer 'Yes.'		
Part 2: What Types of Facilities DO NOT Qualify for Coverage under the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines?  The following questions are meant to determine whether or not your boiler(s) would be disqualified from coverage under the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines. Please only answer the questions that are applicable to your particular boiler(s).			
1.	1. Will your boiler burn any solid fuels (e.g. wood, wood waste, coal, solid waste, tires, etc.)?		
	☐ Yes ☐ No		
2.	2. Will your boiler burn any liquid fuels other than ultra low-sulfur (containing no more than 15 parts per million (0.0015 percent) diesel or biodiesel?		
		Yes No Not A	pplicable
3.	If located in an extreme ozone	e nonattainment area, will your boile	ers and heaters burn any liquid fuels?
		Yes No Not A	pplicable
4.	Does or will any individual boi British thermal units per hour	, ,	pacity of equal to or greater than 100 million

If you answered 'No' or 'Not Applicable' to all of these questions, your facility may qualify for coverage under the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines, and should continue on to Part 3 of the Questionnaire.

☐ No

Yes

If you answered 'Yes' to any of these questions, your facility likely does not qualify for coverage under the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines. Please contact your reviewing authority to confirm that your boiler and/or emergency engine will not qualify for this permit.

Part 3: Does my Boiler, Process Heater and/or Emergency Engine Qualify for Coverage under the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines? The following questions are meant to determine whether or not your boiler and/or process heater and/or emergency engine would qualify for coverage under the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines in Indian Country.

<ol> <li>After completion, will your new or modified source be able to comply with <u>one</u> of the eight options below? See Appendix A for a more detailed description of each option.</li> </ol>
Option 1: Gaseous and/or Liquid Fuels for Boilers and Heaters and All Fuel Types for Engines – attainment, unclassifiable, or attainment/unclassifiable areas and marginal and moderate ozone nonattainment areas – true minor (Permit Condition 17)
Option 2: Gaseous Fuel for Boilers and Heaters and All Fuel Types for Engines – attainment, unclassifiable, or attainment/unclassifiable areas and marginal and moderate ozone nonattainment areas – synthetic minor - (Permit Condition 21.a)
Option 3: Gaseous and/or Liquid Fuels for Boilers and Heaters and All Fuel Types for Engines – serious ozone nonattainment areas – true minor (Permit Condition 18)
Option 4: Gaseous Fuels for Boilers and Heaters and All Fuel Types for Engines – serious ozone nonattainment areas – synthetic minor (Permit Condition 21.b)
Option 5: Gaseous Fuels for Boilers and Process Heaters and All Fuel Types for Engines – severe ozone nonattainment areas – true minor (Permit Condition 19.a)
Option 6: Gaseous and/or Liquid Fuels for Boilers and Process Heaters and All Fuel Types for Engines – severe ozone nonattainment areas – true minor (Permit Condition 19.b)
Option 7: Gaseous Fuels for Boilers and Process Heaters and All Fuel Types for Engines – severe ozone nonattainment areas – synthetic minor (Permit Condition 21.c)
Option 8: Gaseous Fuels for Boilers and Process Heaters and All Fuel Types for Engines – extreme ozone nonattainment areas – true minor (Permit Condition 20)
☐ Yes ☐ No
2. 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

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#### **Conclusion**

If you answered 'Yes' to each of the questions in Part 3, you may qualify for coverage under the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines. If you believe based upon your answers in this questionnaire that the new or modified boiler qualifies for the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines, please submit a Request for Coverage Form to your reviewing authority.

If you answered 'No' to any of these questions, your boiler may not qualify for coverage under the General Air Quality Permit for New or Modified Minor Source Boilers and Emergency Engines. Please contact your reviewing authority to confirm that the boiler will not qualify for this General Permit.

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# Appendix A - Summary of Eligibility Criteria - Operational Limits

"All boilers rated ≥ 10.0 MMBtu/hr" – means you should create a list of the heat input capacity of all of your boilers that are individually rated 10 MMBtu/hr and greater (e.g., 10 MMBtu/hr, 11 MMBtu/hr, 23 MMBtu/hr, and 56 MMBtu/hr). Your "Maximum Combined Capacity" is the sum of that list (e.g., 10+11+23+56 = 100 MMBtu/hr). To be eligible the sum must not exceed the value listed in the table.

"All small boilers and process heaters rated < 10.0 MMBtu/hr" – means you should create a list of the heat input capacity of all of your boilers and process heaters that are individually rated less than 10 MMBtu/hr. (e.g., 5 MMBtu/hr, 1 MMBtu/hr, 0.5 MMBtu/hr, and 0.09 MMBtu/hr). Your "Maximum Combined Capacity" is the sum of that list (e.g., 5+1+0.5+0.09 = 6.59 MMBtu/hr). To be eligible the sum must not exceed the value listed in the table.

# **Ozone Attainment, Unclassifiable and Attainment/Unclassifiable Areas and Marginal and Moderate Ozone Nonattainment Areas** (choose Number 1 or 2)

1. The combined maximum rated capacity of all boilers, process heaters, and engines at the permitted source shall not exceed the following parameters, as applicable. Boilers and process heaters may use gaseous and/or liquid fuels. Engines may burn any fuel type.

Permitted Source Using Gaseous and/or Liquid Fuels in Boilers and Process Heaters and All Fuel Types in Engines	
Type of Emission Units	Maximum Combined Capacity
All boilers rated ≥ 10.0 MMBtu/hr	200 MMBtu/hr
All small boilers and process heaters rated < 10.0 MMBtu/hr	30 MMBtu/hr
All emergency generators (any fuel)	1,500 horsepower (hp)

#### 2. Synthetic Minor Limits:

- i. Annual fuel use of gaseous fuel in all boilers and process heaters shall not exceed 1,500 million standard cubic feet (MMscf) per year in any 12-month period; and
- ii. Combined maximum rated capacity of all emergency engines (all fuel types) shall not exceed 1,500 hp.

#### **Serious Ozone Nonattainment Areas** (choose Number 3 or 4)

3. The combined maximum rated capacity of all boilers, process heaters, and engines at the permitted source shall not exceed the following parameters, as applicable. Boilers and process heaters may use gaseous and/or liquid fuels. Engines may burn any fuel type.

Permitted Source Using Gaseous and/or Liquid Fuels in Boilers and Process Heaters and All Fuel Types in Engines	
Type of Emission Units	Maximum Combined Capacity
All boilers rated ≥ 10.0 MMBtu/hr	160 MMBtu/hr
All small boilers and auxiliary heaters rated < 10.0 MMBtu/hr	20 MMBtu/hr
All emergency generators (all fuels)	1,500 hp

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- 4. Synthetic Minor Limits:
  - i. Annual fuel use of gaseous fuel in all boilers and process heaters shall not exceed 720 MMscf/yr in any 12-month period; and
  - ii. Combined maximum rated capacity of all emergency engines (all fuel types) shall not exceed 1,500 hp.

#### **Severe Ozone Nonattainment Areas** (choose Number 5, 6, or 7)

5. Each permitted source using only gaseous fuel in boilers and process heaters shall meet the following combined maximum allowable rating of emission units. Boilers and process heaters may also use diesel or biodiesel as an emergency backup fuel for up to 500 hours per calendar year. Engines may burn any fuel type.

Permitted Source Using Only Gaseous Fuel in Boilers and Heaters and All Fuel Types in Engines		
Type of Emission Units	Maximum Combined Capacity	
All boilers rated ≥ 10.0 MMBtu/hr	160 MMBtu/hr	
All small boilers and process heaters rated < 10.0 MMBtu/hr	20 MMBtu/hr	
All emergency generators (any fuel)	1,000 hp	

6. Each permitted source with boilers and heaters that use gaseous and/or liquid fuels shall meet the following combined maximum allowable rating of emission units. Engines may burn any fuel type.

Permitted Source Using Gaseous and/or Liquid Fuels in Boilers and Heaters and All Fuel Types in Engines	
Type of Emission Units	Maximum Combined Capacity
All boilers rated ≥ 10.0 MMBtu/hr	120 MMBtu/hr
All small boilers and auxiliary heaters rated < 10.0 MMBtu/hr	20 MMBtu/hr
All emergency generators (all fuels)	1,000 hp

- 7. Synthetic Minor Limits
  - i. Annual fuel use of gaseous fuel in all boilers and process heaters shall not exceed 345 MMscf/yr in any 12-month period; and
  - ii. Combined maximum rated capacity of all emergency engines (all fuel types) shall not exceed 1,000 hp.

#### **Extreme Ozone Nonattainment Areas**

8. The combined maximum rated capacity of all boilers and process heaters at the permitted source shall not exceed the following parameters, as applicable. The permitted source shall only use gaseous fuels in its boilers and process heaters. Engines may burn any fuel type.

Permitted Source Using Gaseous Fuels in Boilers and Heaters and All Fuel Types in Engines		
Types of Emission Units	Combined Allowed Maximum Rating of Emissions Units	
All boilers rated ≥ 2.0 MMBtu/hr	25 MMBtu/hr	
All small boilers and auxiliary heaters rated < 2.0 MMBtu/hr	10 MMBtu/hr	
All emergency generators (all fuels)	500 hp	

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