

C. What Are the Primary Sources of HAP Emissions and What Are the Emissions?

The sources of emissions are the exhaust gases from combustion of gaseous and liquid fuels in a stationary combustion turbine. Hazardous air pollutants that are present in the exhaust gases from stationary combustion turbines include formaldehyde, toluene, benzene, and acetaldehyde.

D. What Are the Emission Limitations and Operating Limitations?

As the owner or operator of an existing lean premix stationary combustion turbine or a new or reconstructed stationary combustion turbine located at a major source of HAP emissions, you must comply with one of the following two emission limitations

by the effective date of the standard (or upon startup if you start up your stationary combustion turbine after the effective date of the standard): (1) Reduce CO emissions in the exhaust from the new or reconstructed stationary combustion turbine by 95 percent or more, if you use an oxidation catalyst emission control device; or (2) reduce the concentration of formaldehyde in the exhaust from the new or reconstructed stationary combustion turbine to 43 parts per billion by volume or less, dry basis (ppbvd), at 15 percent oxygen, if you use means other than an oxidation catalyst emission control device.

There are no operating limitations if you choose to comply with the emission limitation for CO emission reduction. If you comply with the emission limitation for formaldehyde emissions

and your stationary combustion turbine is not lean premix or diffusion flame, you must comply with any additional operating limitations approved by the Administrator, as discussed later.

Finally, as mentioned earlier, stationary combustion turbines with a rated peak power output of less than 1.0 MW, emergency stationary combustion turbines, limited use stationary combustion turbines, and stationary combustion turbines which burn landfill gas or digester gas as their primary fuel, are not required to comply with these emission limitations. In addition, existing diffusion flame stationary combustion turbines, are not required to comply with these emission limitations. The emission limitations for each subcategory are summarized in Table 2 of this preamble.

TABLE 2.—SUMMARY OF EMISSION LIMITATIONS

Subcategory	Emission limitation	Comment
Existing Diffusion Flame Stationary Combustion Turbine ≥ 1.0 MW.	None	No requirements.
Existing Lean Premix Stationary Combustion Turbine ≥ 1.0 MW.	(1) Reduce CO emissions by 95% or more, if you use an oxidation catalyst emission control device. or (2) Reduce the concentration of formaldehyde to 43 ppbvd @ 15% O ₂ , if you use means other than an oxidation catalyst emission control device.	
or New/Reconstructed Stationary Combustion Turbine ≥ 1.0 MW.		
Emergency Stationary Combustion Turbine	No emission limitations	Initial notification requirements only.
or Limited Use Stationary Combustion Turbine		
or Landfill/Digester Gas Stationary Combustion Turbine. ≤ 1 MW Stationary Combustion Turbine	None	No requirements.

E. What Are the Initial Compliance Requirements?

The initial compliance requirements for a stationary combustion turbine vary depending on the subcategory of your combustion turbine and your control strategy.

If you operate a new or reconstructed stationary combustion turbine and comply with the emission limitation for CO emission reduction, you must install a continuous emission monitoring system (CEMS) to measure CO and either carbon dioxide or oxygen simultaneously at the inlet and outlet of the oxidation catalyst emission control device. To demonstrate initial compliance, you must conduct an initial performance evaluation using Performance Specifications 3 and 4A of 40 CFR part 60, appendix B. You must demonstrate that the reduction of CO emissions is at least 95 percent using the first 4-hour average after a

successful performance evaluation. Your inlet and outlet measurements must be on a dry basis and corrected to 15 percent oxygen or equivalent carbon dioxide content. You must also conduct an annual relative accuracy test audit (RATA) of the CEMS using Performance Specifications 3 and 4A of 40 CFR part 60, appendix B.

If you operate a new or reconstructed combustion turbine or an existing lean premix combustion turbine and comply with the emission limitation for formaldehyde emissions, you must conduct an initial performance test using Test Method 320 of 40 CFR part 63, appendix A; ARB Method 430 of California Environmental Protection Agency, Air Resources Board, 2020 L Street, Sacramento, CA 95812; or EPA Solid Waste (SW)-846 Method 0011 to demonstrate that the outlet concentration of formaldehyde is 43 ppbvd or less (corrected to 15 percent

oxygen). Natural gas-fired sources may also use the proposed Test Method 323 of 40 CFR part 63, appendix A, to measure formaldehyde. To correct to 15 percent oxygen, dry basis, you must measure oxygen using Method 3A or 3B of 40 CFR part 60, appendix A, and moisture using Method 4 of 40 CFR part 60, appendix A.

As stated previously, if you choose to comply with the emission limitation for formaldehyde emissions and your stationary combustion turbine is not lean premix or diffusion flame, you must also petition the Administrator for approval of operating limitations or approval of no operating limitations.

If you petition the Administrator for approval of operating limitations, your petition must include the following: (1) Identification of the specific parameters