

where HAP and CO emissions reductions were measured with methods that we are recommending to be used to measure HAP in the proposed rule.

For the emission limitation, we propose to use formaldehyde as a surrogate for all HAP. Formaldehyde is the HAP emitted in the highest concentrations from stationary combustion turbines. In addition, the emission data show that HAP emission levels and formaldehyde emission levels are related, in the sense that when emissions of one are low, emissions of the other are low and vice versa. This leads us to conclude that emission control technologies which lead to reductions in formaldehyde emissions will lead to reductions in HAP emissions.

The emission limitation for formaldehyde is in units of parts per billion, and all measurements must be corrected to 15 percent oxygen, dry basis, to provide a common basis. A volume concentration was chosen for the emission limitation because it can be measured directly.

We based the alternative emission limitation on the ability of lean premix technology to reduce emissions to 43 ppbvd (at 15 percent oxygen). The reduction in formaldehyde emissions is approximately equivalent to that achieved when CO emissions are reduced by 95 percent through the use of an oxidation catalyst emission control device.

As discussed later, we consider the cost of formaldehyde CEMS excessive for the purpose of ensuring continuous compliance with this emission limitation for formaldehyde emissions. As a result, we selected stack emission testing to demonstrate compliance with the emission limitation.

G. How Did We Select the Initial Compliance Requirements?

The emissions tests which form the basis of the proposed rule were conducted using EPA or CARB test methods. The proposed rule requires the use of these EPA or CARB test methods to determine compliance. This ensures that the same procedures that were used to obtain the emission data upon which the emission limitations are based are used for compliance testing. By using the same test methods, we eliminate the possibility of measurement bias and interference influencing determinations of compliance.

For sources complying with the emission limitation to reduce CO emissions, an initial performance evaluation is required. The performance evaluation will validate performance of

the CEMS. The proposed rule also requires an annual relative accuracy test audit (RATA) to ensure that performance of the CEMS does not deteriorate over time. The first 4-hour period following this performance evaluation of the CO CEMS will be used to determine initial compliance with the CO emission reduction limitation.

New and reconstructed sources and existing lean premix combustor turbines complying with the emission limitation to reduce formaldehyde emissions are required to conduct an initial performance test. The purpose of the initial test is to demonstrate initial compliance with the formaldehyde emission limitation.

H. How Did We Select the Continuous Compliance Requirements?

If you must comply with the emission limitations, continuous compliance with these requirements is required at all times except during startup, shutdown, and malfunction of your stationary combustion turbine. You are not required to develop a startup, shutdown or malfunction plan since we do not believe meaningful procedures could be developed.

We consider the use of CEMS the best means of ensuring continuous compliance with emission limitations, and alternatives to CEMS are considered only if we consider the use of a CEMS technically or economically infeasible. For sources complying with the emission limitation for CO emission reduction, we believe it is feasible to require a CEMS because the costs for a CO CEMS are reasonable. Thus, the proposed rule requires the use of a CO CEMS to continuously monitor the reduction in CO emissions.

For sources complying with the emission limitation for formaldehyde emissions, we also considered requiring a CEMS; however, we concluded that the costs of a formaldehyde CEMS were excessive. We considered requiring those sources to continuously monitor operating load to demonstrate continuous compliance because the data establishing the formaldehyde outlet concentration level are based on tests that were done at high loads. However, we believe that the performance of a stationary lean premix combustion turbine at high load is also indicative of its operation at lower loads. In fact, the operator can make no parameter adjustments that would lead to lower emissions.

We request comments on the continued monitoring of stationary lean premix combustion turbines that have demonstrated initial compliance. The stationary lean premix combustion

turbines are low NO_x emitting and are permitted to continuously attain the permitted NO_x levels. The same technology that results in the maintenance of low NO_x levels is also related to the achievement of low HAP emissions. Therefore, we would like to solicit comments on the feasibility of requiring no additional testing or monitoring after the lean premix stationary combustion turbine has demonstrated initial compliance and is relying on the NO_x permit levels, or low NO_x levels characteristic of lean premix combustor turbines (e.g. NO_x levels guaranteed by the manufacturer) if there are no permit levels, to assure continuing good performance. We are proposing this in an attempt to streamline the continuous testing, monitoring, and reporting requirements.

Finally, since we are unsure what new HAP emission control technologies might emerge, we do not know whether it will be necessary to establish additional operating limitations to ensure continuous compliance with the formaldehyde emission limitation for sources that are not lean premix or diffusion flame. Thus, as outlined earlier, the proposed rule requires you to petition the Administrator for approval of additional operating limitations or for approval of no additional operating limitations.

I. How Did We Select the Monitoring and Testing Methods to Measure These Low Concentrations of CO and Formaldehyde?

We believe CEMS are available which can measure CO emissions at the low concentrations found in the exhaust from a stationary combustion turbine following an oxidation catalyst emission control device. Our performance specifications for CO CEMS (PS4 and PS4A), however, have not been updated recently and do not reflect the performance capabilities of such systems at these low CO concentration levels.

As a result, we solicit comments on the performance capabilities of state-of-the-art CO CEMS and their ability to accurately measure the low concentrations of CO experienced in the exhaust of a stationary combustion turbine following an oxidation catalyst emission control device. We also solicit comments with specific recommendations on the changes we should make to our performance specifications for CO CEMS (PS4 and PS4A) to ensure the installation and use of CEMS which can be used to determine compliance with the proposed emission limitation for CO emission reduction. In addition, we