

measurement or EPA Method 25A of appendix A to 40 CFR part 60 for THC measurement. The final rule also provides for an alternate test method (ASTM D 6522-00) for testing engines that burn natural gas as fuel. You must demonstrate that the outlet concentration of CO or THC emissions from the new or reconstructed affected source or emission control device is 20 ppmvd or less, corrected to 15 percent O₂ content, using the first 4-hour rolling average after a successful performance evaluation.

If you comply with the percent reduction emission limitation, you must conduct an initial performance test to determine the capture and control efficiencies of the equipment and to establish operating limits to be achieved on a continuous basis. The performance test would have to be completed no later than 180 days after the compliance date for new or reconstructed affected sources. You must demonstrate that the reduction in CO or THC emissions is at least 96 percent using the first 4-hour rolling average after a successful performance evaluation. Your inlet and outlet measurements must be on a dry basis and corrected to 15 percent O₂ content.

If you use a capture system and add-on control device, you determine both the efficiency of the capture system and the emission reduction efficiency of the control device. To determine the capture efficiency, you either verify the presence of a potential to emit (PTE) using EPA Method 204 of 40 CFR part 51, appendix M, or use one of the protocols in 40 CFR 63.9320 of the final rule to measure capture efficiency. If you have a PTE and all engine testing occurs within the enclosure and you route all exhaust gases from the enclosure to a control device, then you assume 100 percent capture.

To determine the emission reduction efficiency of the control device, you conduct measurements of the inlet and outlet gas streams. The test would consist of three runs, each run lasting at least 1 hour, using the following EPA Methods in 40 CFR part 60, appendix A:

- Method 1 or 1A for selection of the sampling sites;
 - Method 2, 2A, 2C, 2D, 2F, or 2G to determine the gas volumetric flow rate;
 - Method 3, 3A, or 3B for gas analysis to determine dry molecular weight;
 - Method 4 to determine stack moisture; and
 - Method 25 or 25A to determine organic volatile matter concentration.
- Alternatively, any other test method or data that have been validated according to the applicable procedures in Method 301 of 40 CFR part 63, appendix A, and

approved by the Administrator could be used.

E. What Are the Continuous Compliance Requirements?

Several general continuous compliance requirements apply to affected sources required to comply with the applicable emission limitation. You are required to comply with the applicable emission limitation at all times, except during SSM of any control equipment and associated monitoring equipment related to the new or reconstructed affected source emissions. You must operate and maintain your air pollution control equipment and monitoring equipment according to good air pollution control practices at all times. You must conduct monitoring at all times that the new or reconstructed affected source is in operation except during periods of malfunction of the monitoring equipment or necessary repairs and quality assurance or control activities, such as calibration drift checks.

For each new or reconstructed affected source operation on which you use a capture system and control device, the continuous parameter monitoring results for each month would affect your compliance determination. If the monitoring results indicate no deviations from the operating limits and there were no bypasses of the control device, you assume the capture system and control device are achieving the same percent emission reduction efficiency as during the most recent performance test in which compliance was demonstrated. If there are any deviations from the operating limits during the month or any bypasses of the control device, you account for them in the calculation of the monthly emissions by assuming the capture system and control device were achieving zero emission reduction during the periods of deviation. Then, you determine the overall percent reduction of CO or THC emissions.

If you use an emission capture system and control device, the final rule would require you to achieve, on a continuous basis, the operating limits you establish during the performance test. If the continuous monitoring shows that the capture system and control device is operating outside the range of values established during the performance test, you have deviated from the established operating limits.

If you operate a capture system and control device that allow emissions to bypass the control device, you have to demonstrate that CO or THC emissions collected by the capture system are being routed to the control device by

monitoring for potential bypass of the control device. You may choose from the following four monitoring procedures:

- Flow control position indicator to provide a record of whether the exhaust stream is directed to the control device;
- Car-seal or lock-and-key valve closures to secure the bypass line valve in the closed position when the control device is operating;
- Valve closure monitoring to ensure any bypass line valve or damper is closed when the control device is operating; or
- Automatic shutdown system to stop the engine test cell/stand operation when flow is diverted from the control device.

If the bypass monitoring procedures indicate that emissions are not routed to the control device, you have deviated from the emission limits.

To demonstrate continuous compliance with either the percent reduction or outlet concentration emission limitation using continuous parameter monitoring systems, you must continuously monitor and record the appropriate parameter, depending on the control device used. The operating parameter must not drop below the level established by the performance test in order to maintain the reduction in CO or THC emissions at or above 96 percent, or 20 ppmvd or less, corrected to 15 percent O₂ content, based on a rolling 4-hour average, averaged every hour.

To demonstrate continuous compliance with the outlet concentration emission limitation using CEMS, you must calibrate and operate your CEMS according to the requirements in 40 CFR 63.8. You must continuously monitor and record the CO or THC and O₂ concentrations at the outlet of the engine test cell/stand or emission control device and calculate the CO or THC emission concentration for each hour. Then, the hourly CO or THC emission concentrations for each hour of the 4-hour compliance period are averaged together. The outlet CO or THC emission concentration must be 20 ppmvd or less, corrected to 15 percent O₂ content, based on the 4-hour rolling average, averaged every hour.

To demonstrate continuous compliance with the percent reduction emission limitation using CEMS, you must calibrate and operate your CEMS according to the requirements in 40 CFR 63.8. You must continuously monitor and record the CO or THC, and O₂ concentration before and after the emission control device and calculate the percent reduction in CO or THC emissions hourly. The reduction in CO