

Environmental Protection Agency

Pt. 63, Subpt. DDDDD, Table 6

To conduct a performance test for the following pollutant...	You must...	Using...
4. Mercury	<p>f. Convert emissions concentration to lb per MMBtu emission rates.</p> <p>a. Select sampling ports location and the number of traverse points.</p> <p>b. Determine velocity and volumetric flow-rate of the stack gas.</p> <p>c. Determine oxygen or carbon dioxide concentration of the stack gas.</p> <p>d. Measure the moisture content of the stack gas.</p> <p>e. Measure the mercury emission concentration.</p>	<p>Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.</p> <p>Method 1 at 40 CFR part 60, appendix A-1 of this chapter.</p> <p>Method 2, 2F, or 2G at 40 CFR part 60, appendix A-1 or A-2 of this chapter.</p> <p>Method 3A or 3B at 40 CFR part 60, appendix A-1 of this chapter, or ANSI/ASME PTC 19.10-1981.^a</p> <p>Method 4 at 40 CFR part 60, appendix A-3 of this chapter.</p> <p>Method 29, 30A, or 30B (M29, M30A, or M30B) at 40 CFR part 60, appendix A-8 of this chapter or Method 101A at 40 CFR part 61, appendix B of this chapter, or ASTM Method D6784.^a</p>
5. CO	<p>f. Convert emissions concentration to lb per MMBtu emission rates.</p> <p>a. Select the sampling ports location and the number of traverse points.</p> <p>b. Determine oxygen concentration of the stack gas.</p> <p>c. Measure the moisture content of the stack gas.</p> <p>d. Measure the CO emission concentration</p>	<p>Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.</p> <p>Method 1 at 40 CFR part 60, appendix A-1 of this chapter.</p> <p>Method 3A or 3B at 40 CFR part 60, appendix A-3 of this chapter, or ASTM D6522-00 (Reapproved 2005), or ANSI/ASME PTC 19.10-1981.^a</p> <p>Method 4 at 40 CFR part 60, appendix A-3 of this chapter.</p> <p>Method 10 at 40 CFR part 60, appendix A-4 of this chapter. Use a measurement span value of 2 times the concentration of the applicable emission limit.</p>

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7200, Jan. 31, 2013]

TABLE 6 TO SUBPART DDDDD OF PART 63—FUEL ANALYSIS REQUIREMENTS

As stated in § 63.7521, you must comply with the following requirements for fuel analysis testing for existing, new or reconstructed affected sources. However, equivalent methods (as defined in § 63.7575) may be used in lieu of the prescribed methods at the discretion of the source owner or operator:

To conduct a fuel analysis for the following pollutant . . .	You must . . .	Using . . .
1. Mercury	<p>a. Collect fuel samples</p> <p>b. Composite fuel samples</p> <p>c. Prepare composited fuel samples</p> <p>d. Determine heat content of the fuel type.</p> <p>e. Determine moisture content of the fuel type.</p> <p>f. Measure mercury concentration in fuel sample.</p> <p>g. Convert concentration into units of pounds of mercury per MMBtu of heat content.</p>	<p>Procedure in § 63.7521(c) or ASTM D5192^a, or ASTM D7430^a, or ASTM D6863^a, or ASTM D2234/D2234M^a(for coal) or EPA 1631 or EPA 1631E or ASTM D6323^a (for solid), or EPA 821-R-01-013 (for liquid or solid), or ASTM D4177^a (for liquid), or ASTM D4057^a (for liquid), or equivalent.</p> <p>Procedure in § 63.7521(d) or equivalent.</p> <p>EPA SW-846-3050B^a (for solid samples), EPA SW-846-3020A^a (for liquid samples), ASTM D2013/D2013M^a (for coal), ASTM D5198^a (for biomass), or EPA 3050^a (for solid fuel), or EPA 821-R-01-013^a (for liquid or solid), or equivalent.</p> <p>ASTM D5865^a (for coal) or ASTM E711^a (for biomass), or ASTM D5864^a for liquids and other solids, or ASTM D240^a or equivalent.</p> <p>ASTM D3173^a, ASTM E871^a, or ASTM D5864^a, or ASTM D240, or ASTM D95^a (for liquid fuels), or ASTM D4006^a (for liquid fuels), or ASTM D4177^a (for liquid fuels) or ASTM D4057^a (for liquid fuels), or equivalent.</p> <p>ASTM D6722^a (for coal), EPA SW-846-7471B^a (for solid samples), or EPA SW-846-7470A^a (for liquid samples), or equivalent.</p> <p>Equation 8 in § 63.7530.</p>

Pt. 63, Subpt. DDDDD, Table 6

40 CFR Ch. I (7–1–14 Edition)

To conduct a fuel analysis for the following pollutant . . .	You must . . .	Using . . .
2. HCl	<p>h. Calculate the mercury emission rate from the boiler or process heater in units of pounds per million Btu.</p> <p>a. Collect fuel samples</p> <p>b. Composite fuel samples</p> <p>c. Prepare composited fuel samples</p> <p>d. Determine heat content of the fuel type.</p> <p>e. Determine moisture content of the fuel type.</p> <p>f. Measure chlorine concentration in fuel sample.</p> <p>g. Convert concentrations into units of pounds of HCl per MMBtu of heat content.</p> <p>h. Calculate the HCl emission rate from the boiler or process heater in units of pounds per million Btu.</p>	<p>Equations 10 and 12 in § 63.7530.</p> <p>Procedure in § 63.7521(c) or ASTM D5192^a, or ASTM D7430^a, or ASTM D6883^a, or ASTM D2234/ D2234M^a (for coal) or ASTM D6323^a (for coal or biomass), ASTM D4177^a (for liquid fuels) or ASTM D4057^a (for liquid fuels), or equivalent.</p> <p>Procedure in § 63.7521(d) or equivalent.</p> <p>EPA SW-846-3050B^a (for solid samples), EPA SW-846-3020A^a (for liquid samples), ASTM D2013/ D2013M^a (for coal), or ASTM D5198^a (for biomass), or EPA 3050^a or equivalent.</p> <p>ASTM D5865^a (for coal) or ASTM E711^a (for biomass), ASTM D5864, ASTM D240^a or equivalent.</p> <p>ASTM D3173^a or ASTM E871^a, or D5864^a, or ASTM D240^a, or ASTM D95^a (for liquid fuels), or ASTM D4006^a (for liquid fuels), or ASTM D4177^a (for liquid fuels) or ASTM D4057^a (for liquid fuels) or equivalent.</p> <p>EPA SW-846-9250^a, ASTM D6721^a, ASTM D4208^a (for coal), or EPA SW-846-5050^a or ASTM E776^a (for solid fuel), or EPA SW-846-9056^a or SW-846-9076^a (for solids or liquids) or equivalent.</p> <p>Equation 7 in § 63.7530.</p> <p>Equations 10 and 11 in § 63.7530.</p>
3. Mercury Fuel Specification for other gas 1 fuels.	<p>a. Measure mercury concentration in the fuel sample and convert to units of micrograms per cubic meter.</p> <p>b. Measure mercury concentration in the exhaust gas when firing only the other gas 1 fuel is fired in the boiler or process heater.</p>	<p>Method 30B (M30B) at 40 CFR part 60, appendix A-8 of this chapter or ASTM D5954^a, ASTM D6350^a, ISO 6978-1:2003(E)^a, or ISO 6978-2:2003(E)^a, or EPA-1631^a or equivalent.</p> <p>Method 29, 30A, or 30B (M29, M30A, or M30B) at 40 CFR part 60, appendix A-8 of this chapter or Method 101A or Method 102 at 40 CFR part 61, appendix B of this chapter, or ASTM Method D6784^a or equivalent.</p>
4. TSM for solid fuels	<p>a. Collect fuel samples</p> <p>b. Composite fuel samples</p> <p>c. Prepare composited fuel samples</p> <p>d. Determine heat content of the fuel type.</p> <p>e. Determine moisture content of the fuel type.</p> <p>f. Measure TSM concentration in fuel sample.</p> <p>g. Convert concentrations into units of pounds of TSM per MMBtu of heat content.</p> <p>h. Calculate the TSM emission rate from the boiler or process heater in units of pounds per million Btu.</p>	<p>Procedure in § 63.7521(c) or ASTM D5192^a, or ASTM D7430^a, or ASTM D6883^a, or ASTM D2234/ D2234M^a (for coal) or ASTM D6323^a (for coal or biomass), or ASTM D4177^a (for liquid fuels) or ASTM D4057^a (for liquid fuels), or equivalent.</p> <p>Procedure in § 63.7521(d) or equivalent.</p> <p>EPA SW-846-3050B^a (for solid samples), EPA SW-846-3020A^a (for liquid samples), ASTM D2013/ D2013M^a (for coal), ASTM D5198^a or TAPPI T266^a (for biomass), or EPA 3050^a or equivalent.</p> <p>ASTM D5865^a (for coal) or ASTM E711^a (for biomass), or ASTM D5864^a for liquids and other solids, or ASTM D240^a or equivalent.</p> <p>ASTM D3173^a or ASTM E871^a, or D5864, or ASTM D240^a, or ASTM D95^a (for liquid fuels), or ASTM D4006^a (for liquid fuels), or ASTM D4177^a (for liquid fuels) or ASTM D4057^a (for liquid fuels), or equivalent.</p> <p>ASTM D3683^a, or ASTM D4606^a, or ASTM D6357^a or EPA 200.8^a or EPA SW-846-6020^a, or EPA SW-846-6020A^a, or EPA SW-846-6010C^a, EPA 7060^a or EPA 7060A^a (for arsenic only), or EPA SW-846-7740^a (for selenium only).</p> <p>Equation 9 in § 63.7530.</p> <p>Equations 10 and 13 in § 63.7530.</p>

^aIncorporated by reference, see § 63.14.

[78 F.R. 7201, Jan. 31, 2013]