

§ 62.14452

40 CFR Ch. I (7-1-07 Edition)

(b) After the initial performance test is completed or is required to be completed under § 62.14470, whichever date comes first, you must:

(1) Determine compliance with the opacity limit by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods listed in § 62.14452.

(2) Determine compliance with the PM, CO, and HCl emission limits by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods listed in § 62.14452. If all three performance tests over a 3-year period indicate compliance with the emission limit for a pollutant (PM, CO, or HCl), you may forego a performance test for that pollutant for the next 2 years. At a minimum, you must conduct a performance test for PM, CO, and HCl every third year (no more than 36 months following the previous performance test). If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCl), you may forego a performance test for that pollutant for an additional 2 years. If any performance test indicates noncompliance with the respective emission limit, you must conduct a performance test for that pollut-

ant annually until all annual performance tests over a 3-year period indicate compliance with the emission limit.

(c) The EPA Administrator may request a repeat performance test at any time.

§ 62.14452 What test methods and procedures must I use?

You must use the following test methods and procedures to conduct performance tests to determine compliance with the emission limits:

(a) All performance tests must consist of a minimum of three test runs conducted under representative operating conditions;

(b) The minimum sample time must be 1 hour per test run unless otherwise indicated in this section;

(c) You must use EPA Reference Method 1 of 40 CFR part 60, appendix A to select the sampling location and number of traverse points;

(d) You must use EPA Reference Method 3, 3A, or 3B of 40 CFR part 60, appendix A for gas composition analysis, including measurement of oxygen concentration. You must use EPA Reference Method 3, 3A, or 3B of 40 CFR part 60, appendix A simultaneously with each reference method;

(e) You must adjust pollutant concentrations to 7 percent oxygen using the following equation:

$$C_{adj} = C_{meas} (20.9 - 7) / (20.9 - \%O_2) \quad (\text{Eq. 1})$$

Where:

C_{adj} = pollutant concentration adjusted to 7 percent oxygen;

C_{meas} = pollutant concentration measured on a dry basis at standard conditions

$(20.9 - 7)$ = 20.9 percent oxygen—7 percent oxygen (defined oxygen correction basis);

20.9 = oxygen concentration in air, percent; and

$\%O_2$ = oxygen concentration measured on a dry basis at standard conditions, percent.

(f) Except as provided in paragraph (l) of this section, you must use EPA Reference Method 5 or 29 of 40 CFR part 60, appendix A to measure particulate matter emissions;

(g) Except as provided in paragraph (l) of this section, you must use EPA

Reference Method 9 of 40 CFR part 60, appendix A to measure stack opacity;

(h) Except as provided in paragraph (l) of this section, you must use EPA Reference Method 10 or 10B of 40 CFR part 60, appendix A to measure the CO emissions;

(i) Except as provided in paragraph (l) of this section, you must use EPA Reference Method 23 of 40 CFR part 60, appendix A to measure total dioxin/furan emissions. The minimum sample time must be 4 hours per test run. If you have selected the toxic equivalency standards for dioxin/furans under § 62.14411, you must use the following procedures to determine compliance:

Environmental Protection Agency

§ 62.14453

(1) Measure the concentration of each dioxin/furan tetra-through octa-congener emitted using EPA Reference Method 23;

(2) For each dioxin/furan congener measured in accordance with paragraph (i)(1) of this section, multiply the congener concentration by its corresponding toxic equivalency factor specified in Table 2 of this subpart;

(3) Sum the products calculated in accordance with paragraph (i)(2) of this

section to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

(j) Except as provided in paragraph (l) of this section, you must use EPA Reference Method 26 of 40 CFR part 60, appendix A to measure HCl emissions. If you have selected the percentage reduction standards for HCl under §62.14411, compute the percentage reduction in HCl emissions (%R_{HCl}) using the following formula:

$$(\%R_{HCl}) = \left(\frac{E_i - E_o}{E_i} \right) \times 100 \quad (\text{Eq. 2})$$

Where:

%R_{HCl} = percentage reduction of HCl emissions achieved;

E_i = HCl emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis at standard conditions); and

E_o = HCl emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis at standard conditions).

(k) Except as provided in paragraph (l) of this section, you must use EPA Reference Method 29 of 40 CFR part 60, appendix A to measure Pb, Cd, and Hg emissions. If you have selected the percentage reduction standards for metals under §62.14411, compute the percentage reduction in emissions (%R_{metal}) using the following formula:

$$(\%R_{metal}) = \left(\frac{E_i - E_o}{E_i} \right) \times 100 \quad (\text{Eq. 3})$$

Where:

%R_{metal} = percentage reduction of metal emission (Pb, Cd, or Hg) achieved;

E_i = metal emission concentration (Pb, Cd, or Hg) measured at the control device inlet, corrected to 7 percent oxygen (dry basis at standard conditions); and

E_o = metal emission concentration (Pb, Cd, or Hg) measured at the control device outlet, corrected to 7 percent oxygen (dry basis at standard conditions).

(l) If you are using a continuous emission monitoring system (CEMS) to demonstrate compliance with any of the emission limits under §§62.14411 or 62.14412, you must:

(1) Determine compliance with the appropriate emission limit(s) using a 12-hour rolling average, calculated each hour as the average of the previous 12 operating hours (not including startup, shutdown, or malfunction).

Performance tests using EPA Reference Methods are not required for pollutants monitored with CEMS.

(2) Operate a CEMS to measure oxygen concentration, adjusting pollutant concentrations to 7 percent oxygen as specified in paragraph (e) of this section.

(3) Operate all CEMS in accordance with the applicable procedures under appendices B and F of 40 CFR part 60.

(m) Use of the bypass stack during a performance test will invalidate the performance test.

§ 62.14453 What must I monitor?

(a) If your HMIWI is a small rural HMIWI, or your HMIWI is equipped with a dry scrubber followed by a fabric filter, a wet scrubber, or a dry