Environmental Protection Agency

(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:

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

Where:

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

 $C_{\mathrm{meas}} = \mathrm{pollutant}$ 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 (1) 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:

- (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:

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

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Where:

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

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

 ${
m E_o}$ = 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 $\S62.14411$, compute the percentage reduction in emissions (% R_{metal}) using the following formula:

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

Where:

 ${\rm \%R_{metal}}$ = 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

 $E_{\rm o}$ = metal emission concentration (Pb, Cd, or Hg) measured at the control device outlet, corrected to 7 percent oxygen (dry basis at standard conditions).

(1) 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

scrubber followed by a fabric filter and wet scrubber:

(1) You must establish the appropriate maximum and minimum operating parameters, indicated in Table 3, as site-specific operating parameters during the initial performance test to determine compliance with the emission limits; and

(2) After the date on which the initial performance test is completed or is required to be completed under §62.14470, whichever comes first, your HMIWI must not operate above any of the applicable maximum operating parameters or below any of the applicable minimum operating parameters listed in Table 3 and measured as 3-hour rolling averages (calculated each hour as the average of the previous 3 operating hours), at all times except during startup, shutdown, malfunction, and performance tests.

(b) If your HMIWI is not a small rural HMIWI, and you are using an air pollution control device other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber to comply with the emission limits under §62.14411, you must petition the EPA Administrator for sitespecific operating parameters to be established during the initial performance test and you must continuously monitor those parameters thereafter. You may not conduct the initial performance test until the EPA Administrator has approved the petition.