(8) The analyzer shall be able to meet the specifications in paragraph (a) of this section under the following conditions:

(i) After a 30 minute warm-up from the prevailing ambient conditions;
(ii) Between 0 to 85 percent relative humidity; and
(iii) During variations of ±50 percent of nominal sample flow.

(b) The inclusion of a raw CO analyzer as specified in 40 CFR part 1065 is required in order to accurately determine the CVS dilution factor.

§ 86.1513 Fuel specifications.

The requirements of this section are set forth in 40 CFR part 1065, subpart H, for heavy-duty engines and in §86.113–94 for light-duty trucks.

§ 86.1514 Analytical gases.

(a) The final idle emission test results shall be reported as percent for carbon monoxide on a dry basis.

(b) If the raw CO sampling system specified in 40 CFR part 1065 is used, the analytical gases specified in 40 CFR part 1065, subpart H, shall be used.

(c) If a CVS sampling system is used, the analytical gases specified in 40 CFR part 1065, subpart H, shall be used.

§ 86.1516 Calibration; frequency and overview.

(a) Calibrations shall be performed as specified in §§86.1518–84 through 86.1520–84.

(b) At least monthly or after any maintenance which could alter calibration, check the calibration of the CO analyzer. Adjust or repair the analyzer as necessary.

(c) Water traps, filters, or conditioning columns should be checked before each test.

§ 86.1519 CVS calibration.

If the CVS system is used for sampling during the idle emission test, the calibration instructions are specified in 40 CFR part 1065, subpart D, for heavy-duty engines, and §§86.119–78 for light-duty trucks.

§ 86.1522 Carbon monoxide analyzer calibration.

(a) Initial check.

(1) Follow good engineering practice for instrument start-up and operation. Adjust the analyzer to optimize performance on the range specified in §86.1511–84(a)(1).

(2) Calibrate the analyzer with the calibration gas specified in §86.1514–84.

(3) Adjust the electrical span network such that the electrical span point is correct when the analyzer reads the calibration gas correctly.

(4) Determine that the analyzer complies with the specifications in §86.1511–84.

(b) Periodic check. Follow paragraphs (a) (1), (2), and (3) of this section as specified by §86.1516–84(b). Adjust or repair the analyzer as necessary.

§ 86.1524 Carbon dioxide analyzer calibration.

(a) The calibration requirements for the dilute-sample CO₂ analyzer are specified in 40 CFR part 1065, subpart D, for heavy-duty engines and §§86.124–78 for light-duty trucks.

(b) The calibration requirements for the raw CO₂ analyzer are specified in 40 CFR part 1065, subpart D.

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