

§ 1065.202

40 CFR Ch. I (7–1–08 Edition)

(h), effective July 7, 2008. For the convenience of the user, the added and revised text is set forth as follows:

§ 1065.201 Overview and general provisions.

(a) *Scope.* This subpart specifies measurement instruments and associated system requirements related to emission testing in a laboratory or similar environment and in the field. This includes laboratory instruments and portable emission measurement systems (PEMS) for measuring engine parameters, ambient conditions, flow-related parameters, and emission concentrations.

(b) *Instrument types.* You may use any of the specified instruments as described in this subpart to perform emission tests. If you want to use one of these instruments in a way that is not specified in this subpart, or if you want to use a different instrument, you must first get us to approve your alternate procedure under §1065.10. Where we specify more than one instrument for a particular measurement, we may identify which instrument serves as the reference for comparing with an alternate procedure.

(h) *Recommended practices.* This subpart identifies a variety of recommended but not required practices for proper measurements. We believe in most cases it is necessary to follow these recommended practices for accurate and repeatable measurements and we intend to follow them as much as possible for our testing. However, we do not specifically require you to follow these recommended practices to perform a valid test, as long as you meet the required calibrations and verifications of measurement systems specified in subpart D of this part.

§ 1065.202 Data updating, recording, and control.

Your test system must be able to update data, record data and control systems related to operator demand, the dynamometer, sampling equipment, and measurement instruments. Use data acquisition and control systems that can record at the specified minimum frequencies, as follows:

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TABLE 1 OF § 1065.202—DATA RECORDING AND CONTROL MINIMUM FREQUENCIES

Applicable test protocol section	Measured values	Minimum command and control frequency	Minimum recording frequency
§ 1065.510	Speed and torque during an engine step-map.	1 Hz	1 mean value per step.
§ 1065.510	Speed and torque during an engine sweep-map.	5 Hz	1 Hz means.
§ 1065.514, § 1065.530	Transient duty cycle reference and feedback speeds and torques.	5 Hz	1 Hz means.
§ 1065.514, § 1065.530	Steady-state and ramped-modal duty cycle reference and feedback speeds and torques.	1 Hz	1 Hz.
§ 1065.520, § 1065.530, § 1065.550	Continuous concentrations of raw or dilute analyzers.	N/A	1 Hz.
§ 1065.520, § 1065.530, § 1065.550	Batch concentrations of raw or dilute analyzers.	N/A	1 mean value per test interval.
§ 1065.530, § 1065.545	Diluted exhaust flow rate from a CVS with a heat exchanger upstream of the flow measurement.	N/A	1 Hz.
§ 1065.530, § 1065.545	Diluted exhaust flow rate from a CVS without a heat exchanger upstream of the flow measurement.	5 Hz	1 Hz means.
§ 1065.530, § 1065.545	Intake-air or raw-exhaust flow rate	N/A	1 Hz means.
§ 1065.530, § 1065.545	Dilution air if actively controlled	5 Hz	1 Hz means.
§ 1065.530	Sample flow from a CVS that has a heat exchanger.	1 Hz	1 Hz.
§ 1065.530, § 1065.545	Sample flow from a CVS does not have a heat exchanger.	5 Hz	1 Hz mean.

§ 1065.205 Performance specifications for measurement instruments.

Your test system as a whole must meet all the applicable calibrations, verifications, and test-validation criteria specified in subparts D and F of

this part or subpart J of this part for using PEMS and for performing field testing. We recommend that your instruments meet the specifications in Table 1 of this section for all ranges