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## 40 C.F.R. § 53.54

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### Test for proper sampler operation following power interruptions.

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(a) *Overview.* (1) This test procedure is designed to test certain performance parameters of the candidate sampler during a test period in which power interruptions of various duration occur. The performance parameters tested are:

- (i) Proper flow rate performance of the sampler.
- (ii) Accuracy of the sampler's average flow rate, CV, and sample volume measurements.
- (iii) Accuracy of the sampler's reported elapsed sampling time.
- (iv) Accuracy of the reported time and duration of power interruptions.

(2) This test shall be conducted during operation of the test sampler over a continuous 6-hour test period during which the sampler's flow rate shall be measured and recorded at intervals not to exceed 5 minutes. The performance parameters tested under this procedure, the corresponding minimum performance specifications, and the applicable test conditions are summarized in table E-1 of this subpart. Each performance parameter tested, as described or determined in the test procedure, must meet or exceed the associated performance specification to successfully pass this test.

(b) *Required test equipment.* (1) Flow rate meter, suitable for measuring and recording the actual volumetric sample flow rate at the sampler downtube, with a minimum range of 10 to 25 L/min, 2 percent certified, NIST-traceable accuracy. Optional capability for continuous (analog) recording capability or digital recording at intervals not to exceed 5 minutes is recommended. While a flow meter which provides a direct indication of volumetric flow rate is preferred for this test, an alternative certified flow measurement device may be used as long as appropriate volumetric flow rate corrections are made based on measurements of actual ambient temperature and pressure conditions.

(2) Ambient air temperature sensor (if needed for volumetric corrections to flow rate measurements), with a resolution of 0.1 °C, certified accurate to within 0.5 °C, and continuous (analog) recording capability or digital recording at intervals not to exceed 5 minutes.

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