

§ 1065.10

40 CFR Ch. I (7-1-04 Edition)

This subpart...	Describes these specifications or procedures...
Subpart E	How to prepare engines for testing, including service accumulation.
Subpart F	How to test for emissions.
Subpart G	How to calculate emission levels from measured data.
Subpart H	[Reserved].
Subpart I	How to measure emissions from engines fueled with an oxygenated fuel such as methanol or ethanol.
Subpart J	How to do field testing of in-use vehicles and equipment.
Subpart K	Definitions, abbreviations, and other reference information that apply to emission testing.

§ 1065.10 Other test procedures.

(a) *Your testing.* These test procedures apply for all testing that you do to show compliance with emission standards, with a few exceptions listed in this section.

(b) *Our testing.* These test procedures generally apply for testing that we do to determine if your engines comply with applicable emission standards. We may conduct other testing as allowed by the Act.

(c) *Exceptions.* You may be allowed or required to use test procedures other than those specified in this part in the following cases:

(1) The test procedures in this part are intended to produce emission measurements equivalent to those that would result from measuring emissions during in-use operation using the same engine configuration installed in a piece of equipment. If good engineering judgment indicates that use of the procedures in this part for an engine would result in measurements that are not representative of in-use operation of that engine, you must notify us. If we determine that using these procedures would result in measurements that are significantly unrepresentative and that changing the procedures will result in more representative measurements and not decrease the stringency of emission standards, we will specify changes to the procedures. In your notification to us, you should recommend specific changes you think are necessary.

(2) You may ask to use emission data collected using other test procedures, such as those of the California Air Resources Board or the International Organization for Standardization. We will allow this only if you show us that these data are equivalent to data collected using our test procedures.

(3) You may ask to use alternate procedures that produce measurements equivalent to those from the specified procedures. If you send us a written request showing your procedures are equivalent, and we agree that they are equivalent, we will allow you to use them. You may not use an alternate procedure until we approve them, either by: telling you directly that you may use this procedure; or issuing guidance to all manufacturers, which allows you to use the alternate procedure without additional approval.

(4) You may ask to use special test procedures if your engine cannot be tested under the specified procedures (for example, your engine cannot operate on the specified transient cycle). In this case, tell us in writing why you cannot satisfactorily test your engines using this part's procedures and ask to use a different approach. We will approve your special test procedures if we determine they would produce emission measurements that are representative of those that would result from measuring emissions during in-use operation. You may not use special procedures until we approve them.

(5) The standard-setting part may contain other specifications for test procedures that apply for your engines. In cases where it is not possible to comply with both the test procedures in those parts and the test procedures in this part, you must comply with the test procedures specified in the standard-setting part. Those other parts may also allow you to deviate from the test procedures of this part for other reasons.

EFFECTIVE DATE NOTE: At 69 FR 39260, June 29, 2004, §1065.10 was amended by revising paragraph (c)(3), effective Aug. 30, 2004. For the convenience of the user, the revised text is set forth as follows:

§ 1065.10 Other test procedures.

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(c) * * *

(3) You may ask to use alternate procedures that produce measurements equivalent to those from the specified procedures. If you send us a written request showing your procedures are equivalent, and we agree that they are equivalent, we will allow you to use them. You may not use an alternate procedure until we approve them, either by: telling you directly that you may use this procedure; or issuing guidance to all manufacturers, which allows you to use the alternate procedure without additional approval. You may use the statistical procedures specified in 40 CFR 86.1306-07(d) to demonstrate equivalence, except that you test for equal variances by performing the F-test as fol-

lows, instead of the method specified in §86.1306-07(d)(5)(iv)(C):

(i) Form the F ratio: $F = (Asd/Rsd)^2$.

Where:

Asd = the standard deviation of measurements with the alternate system.

Rsd = the standard deviation of measurements with the reference system.

(ii) F must be less than the critical t value, Fcrit, at a 90% confidence interval for "n-1" degrees of freedom.

(iii) The following table lists 90% confidence-interval Fcrit values for n-1 degrees of freedom. Note that nA represents the number of alternate system samples, while nR represents the number of reference system samples:

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nR-1	nA-1	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
6	3.055	3.014	2.983	2.958	2.937	2.92	2.905	2.892	2.881	2.871	2.863	2.855	2.848	2.842	2.836
7	2.827	2.785	2.752	2.725	2.703	2.684	2.668	2.654	2.643	2.632	2.623	2.615	2.607	2.601	2.595
8	2.668	2.624	2.589	2.561	2.538	2.519	2.502	2.488	2.475	2.464	2.455	2.446	2.438	2.431	2.425
9	2.551	2.505	2.469	2.440	2.416	2.396	2.379	2.364	2.351	2.340	2.329	2.320	2.312	2.305	2.298
10	2.461	2.414	2.377	2.347	2.323	2.302	2.284	2.269	2.255	2.244	2.233	2.224	2.215	2.208	2.201
11	2.389	2.342	2.304	2.274	2.248	2.227	2.209	2.193	2.179	2.167	2.156	2.147	2.138	2.13	2.123
12	2.331	2.283	2.245	2.214	2.188	2.166	2.147	2.131	2.117	2.105	2.094	2.084	2.075	2.067	2.06
13	2.283	2.234	2.195	2.164	2.138	2.116	2.097	2.080	2.066	2.053	2.042	2.032	2.023	2.014	2.007
14	2.243	2.193	2.154	2.122	2.095	2.073	2.054	2.037	2.022	2.010	1.998	1.988	1.978	1.97	1.962
15	2.208	2.158	2.119	2.086	2.059	2.037	2.017	2.000	1.985	1.972	1.961	1.950	1.941	1.932	1.924
16	2.178	2.128	2.088	2.055	2.028	2.005	1.985	1.968	1.953	1.940	1.928	1.917	1.908	1.899	1.891
17	2.152	2.102	2.061	2.028	2.001	1.978	1.958	1.940	1.925	1.912	1.900	1.889	1.879	1.87	1.862
18	2.130	2.079	2.038	2.005	1.977	1.954	1.933	1.916	1.900	1.887	1.875	1.864	1.854	1.845	1.837
19	2.109	2.058	2.017	1.984	1.956	1.932	1.912	1.894	1.878	1.865	1.852	1.841	1.831	1.822	1.814
20	2.091	2.040	1.999	1.965	1.937	1.913	1.892	1.875	1.859	1.845	1.833	1.821	1.811	1.802	1.794