standards, and this test is not considered part of the Federal Test Procedure. This procedure shall be conducted on a dynamometer.

(b) *Test conditions and equipment.* All laboratory conditions, laboratory equipment, engine set-up procedures, test fuel, and testing conditions specified in this subpart for transient testing shall apply to the Load Response Test where applicable.

(c) *Test sequence.* (1) The test has 5 separate measurement segments, each identified by a specific engine speed. At each of the following speeds, beginning with the lowest torque point at that engine speed within the NTE control area for NMHC+NO_X, the engine fuel control shall be moved suddenly to the full fuel position and held at that point for four seconds, while the specified speed is maintained constant within the tolerances of the test facility. After the four second full fuel position, the load should be immediately brought back to the minimum NTE control area load for the specified engine speed for a period of 6 seconds. Prior to the beginning of each measurement segment, the engine shall be warmed up at the supplemental steady-state Mode 4 conditions (75% engine load, Speed B as specified in § 86.1360) until engine oil temperature has stabilized.

(i) Speed A as determined in § 86.1360(c);

(ii) Speed B as determined in § 86.1360(c);

(iii) Speed C as determined in § 86.1360(c);

(iv) Speed D as determined in § 86.1360(c);

(v) Speed E as determined in § 86.1360(c).

(2) The test sequence at each engine speed may be repeated, without pause between repeats, if it is necessary to obtain sufficient particulate matter sample amount for analysis.

(3) The exhaust emissions sample shall be analyzed using the applicable procedures under § 86.1340, and the exhaust emission shall be calculated using the applicable procedures under § 86.1342, for each measurement segment. Sampling rates for engine speed, engine load, and gaseous emissions shall performed a minium rate of 10 Hz. Emissions for all regulated pollutants must be calculated and reported for each test speed condition in terms of g/bhp-hr.

(4) Data must be collected beginning with the start of the transition from the minimum NTE control area load to the full fuel position. Data must be collected until the end of the (final if repeated) 6 second operational period at the minimum NTE control area load described in paragraph (c)(1) of this section. Good engineering practice must be used to ensure that the sampling time is properly aligned with the engine operation.

[65 FR 59963, Oct. 6, 2000]

Subpart O—Emission Regulations for New Gasoline-Fueled Otto-Cycle Light-Duty Vehicles and New Gasoline-Fueled Otto-Cycle Light-Duty Trucks; Certification Short Test Procedures

SOURCE: 58 FR 58426, Nov. 1, 1993, unless otherwise noted.

§ 86.1401 Scope; applicability.

(a) This subpart contains CST procedures for gasoline-fueled Otto-cycle light-duty vehicles, and for gasoline-fueled Otto-cycle light-duty trucks, including those certified to operate using both gasoline and another fuel (for example, ''flexible-fuel'' or ''dual-fuel'' light-duty vehicles and light-duty trucks). For the purposes of the Certification Short Test, flexible-fuel or dual-fuel vehicles will be treated as dedicated gasoline vehicles. This subpart applies to 1996 and later mode years.

(b) References in this subpart to engine families and emission control systems shall be deemed to refer to durability groups and test groups as applicable for manufacturers certifying new light-duty vehicles and light-duty trucks under the provisions of subpart S of this part.

[64 FR 23922, May 4, 1999]

§ 86.1402 Definitions.

The definitions in § 86.096–2 apply to this subpart.