

§ 325.57

sound level reading which is applicable at the test site at the time of testing.

(b) *Wind.* The wind velocity at the test site shall be measured at the beginning of each series of noise measurements and at intervals of 5–15 minutes thereafter until it has been established that the wind velocity is essentially constant. Once this fact has been established, wind velocity measurements may be made at intervals of once every hour. Noise measurements may only be made if the measured wind velocity is 12 mph (19.3 kph) or less. Gust wind measurements of up to 20 mph (33.2 kph) are allowed.

(c) *Precipitation.* Measurements are prohibited under any conditions of precipitation, however, measurements may be made with snow on the ground. The ground within the measurement area must be free of standing water.

[40 FR 42437, Sept. 12, 1975, as amended at 41 FR 28267, July 9, 1976]

§ 325.57 Location and operation of sound level measurement systems; stationary test.

(a) The microphone of a sound level measurement system that conforms to the rules in § 325.23 shall be located at a height of not less than 2 feet (.6 m) nor more than 6 feet (1.8 m) above the plane of the roadway surface and not less than 3½ feet (1.1 m) above the surface on which the microphone stands. The preferred microphone height on flat terrain is 4 feet (1.2 m).

(b) When the sound level measurement system is hand-held or otherwise monitored by a person located near its microphone, the holder must orient himself/herself relative to the highway in a manner consistent with the recommendation of the manufacturer of the sound level measurement system. In no case shall the holder or observer be closer than 2 feet (.6 m) from the system's microphone, nor shall he/she locate himself/herself between the microphone and the vehicle being measured.

(c) The microphone of the sound level measurement system shall be oriented toward the vehicle at an angle that is consistent with the recommendation of the system's manufacturer. If the manufacturer of the system does not recommend an angle of orientation for its

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microphone, the microphone shall be oriented at an angle of not less than 70 degrees and not more than perpendicular to the horizontal plane of the test site at the microphone target point.

(d) The sound level measurement system shall be set to the A-weighting network and "fast" meter response mode.

[40 FR 42437, Sept. 12, 1975, as amended at 41 FR 10227, Mar. 10, 1976]

§ 325.59 Measurement procedure; stationary test.

In accordance with the rules in this subpart, a measurement shall be made of the sound level generated by a stationary motor vehicle as follows:

(a) Park the motor vehicle on the test site as specified in § 325.53 of this subpart. If the motor vehicle is a combination (articulated) vehicle, park the combination so that the longitudinal centerlines of the towing vehicle and the towed vehicle or vehicles are in substantial alinement.

(b) Turn off all auxiliary equipment which is installed on the motor vehicle and which is designed to operate under normal conditions only when the vehicle is operating at a speed of 5 mph (8 kph) or less. Examples of such equipment include cranes, asphalt spreaders, liquid or slurry pumps, auxiliary air compressors, welders, and trash compactors.

(c) If the motor vehicle's engine radiator fan drive is equipped with a clutch or similar device that automatically either reduces the rotational speed of the fan or completely disengages the fan from its power source in response to reduced engine cooling loads, park the vehicle before testing with its engine running at high idle or any other speed the operator may choose, for sufficient time but not more than 10 minutes, to permit the engine radiator fan to automatically disengage when the vehicle's noise emissions are measured under stationary test.

(d) With the motor vehicle's transmission in neutral and its clutch engaged, rapidly accelerate the vehicle's engine from idle to its maximum governed speed with wide open throttle. Return the engine's speed to idle.