

### § 325.35

(3) Traffic railings of any type of construction except solid concrete barriers (see § 325.5(c)(4)).

(4) One or more curbs having a vertical height of 1 foot (.3 m) or less.

(c) The following objects may be within the test site if they are outside of the triangular measurement area of the site:

(1) Any vertical surface (such as billboard), regardless of size, having a lower edge more than 15 feet (4.6 m) higher than the surface of the traveled lane of the highway.

(2) Any uniformly smooth sloping surface slanting away from the highway (such as a rise in grade alongside the highway) with a slope that is less than 45 degrees above the horizontal.

(3) Any surface slanting away from the highway that is 45 degrees or more and not more than 90 degrees above the horizontal, if all points on the surface are more than 15 feet (4.6 m) above the surface of the traveled lane of the highway.

(d) The surface of the ground within the measurement area must be relatively flat (see § 325.5(c)(5)). The site shall be a "soft" test site. However, if the site is determined to be "hard," the correction factor specified in § 325.75(a) of this part shall be applied to the measurement.

(e) The traveled lane of the highway within the test site must be dry, paved with relatively smooth concrete or asphalt, and substantially free of—

(1) Holes or other defects which would cause a motor vehicle to emit irregular tire, body, or chassis impact noise; and

(2) Loose material, such as gravel or sand.

(f) The traveled lane of the highway on which the microphone target point is situated must not pass through a tunnel or underpass located within 200 feet (61 m) of that point.

[40 FR 42437, Sept. 12, 1975, as amended at 54 FR 50385, Dec. 6, 1989]

### § 325.35 Ambient conditions; highway operations.

(a)(1) *Sound.* The ambient A-weighted sound level at the microphone location point shall be measured, in the absence of motor vehicle noise emanating from within the clear zone, with fast meter

### 49 CFR Ch. III (10–1–05 Edition)

response using a sound level measurement system that conforms to the rules of § 325.23.

(2) The measured ambient level must be 10 dB(A) or more below that level specified in § 325.7, Table 1, which corresponds to the maximum permissible sound level reading which is applicable at the test site at the time of testing.

(b) *Wind.* The wind velocity at the test 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 condition of precipitation, however, measurements may be made with snow on the ground. The ground surface within the measurement area must be free of standing water.

[40 FR 42437, Sept. 12, 1975, as amended at 41 FR 10227, Mar. 10, 1976; 41 FR 28267, July 9, 1976]

### § 325.37 Location and operation of sound level measurement system; highway operations.

(a) The microphone of a sound level measurement system that conforms to the rules in § 325.23 of this part 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)(1) When the sound level measurement system is hand-held or is 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.

(2) In no case shall the holder or observer be closer than 2 feet (.6 m) from the system's microphone, nor shall he/