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/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 traveled lane of the highway at the microphone target point 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 microphone, the microphone shall be oriented toward the highway at an angle of not less than 70 degrees and not more than perpendicular to the horizontal plane of the traveled lane of the highway 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]

§ 325.39 Measurement procedure; highway operations.

(a) In accordance with the rules in this subpart, a measurement shall be made of the sound level generated by a motor vehicle operating through the measurement area on the traveled lane of the highway within the test site, regardless of the highway grade, load, acceleration or deceleration.

(b) The sound level generated by the motor vehicle is the highest reading observed on the sound level measurement system as the vehicle passes through the measurement area, corrected, when appropriate, in accordance with the rules in subpart F of this part. (Table 1 in § 325.7 lists the range of maximum permissible sound level readings for various test conditions.) The sound level of the vehicle being measured must be observed to rise at least 6 dB(A) before the maximum sound level occurs and to fall at least 6 dB(A) after the maximum sound level occurs in order to be considered a valid sound level reading.

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

Subpart E—Measurement of Noise Emissions; Stationary Test

§ 325.51 Scope of the rules in this subpart.

(a) The rules in this subpart specify conditions and procedures for measuring the sound level generated by a

vehicle when the vehicle's engine is rapidly accelerated from idle to governed speed at wide open throttle with the vehicle stationary, its transmission in neutral, and its clutch engaged, for the purpose of ascertaining whether the motor vehicle conforms to the Standard for Operation Under Stationary Test, 40 CFR 202.21.

(b) The rules in this subpart apply only to a motor vehicle that is equipped with an engine speed governor.

(c) Tests conducted in accordance with the rules of this subpart may be made on either side of the vehicle.

§ 325.53 Site characteristics; stationary test.

(a)(1) The motor vehicle to be tested shall be parked on the test site. A microphone target point shall be established on the ground surface of the site on the centerline of the lane in which the motor vehicle is parked at a point that is within 3 feet (.9 m) of the longitudinal position of the vehicle's exhaust system outlet(s). A microphone location point shall be established on the ground surface not less than 31 feet (9.5 m) and not more than 83 feet (25.3 m) from the microphone target point. Within the test site is a triangular measurement area. A plan view diagram of a standard test site, having an open site within a 50-foot (15.2 m) radius of both the microphone target point and the microphone location point, is shown in Figure 2.

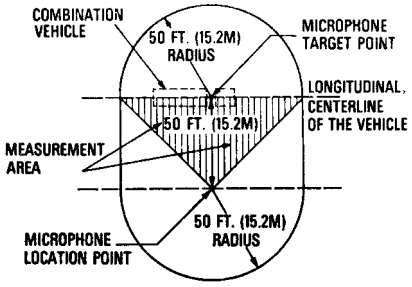

Figure 2
STANDARD TEST SITE; STATIONARY TEST

(2) Measurements may be made at a test site having smaller or greater dimensions in accordance with the rules in subpart F of this part.

(b) The test site must be an open site, essentially free of large sound-reflecting objects. However, the following objects may be within the test site, including the triangular measurement area:

(1) Small cylindrical objects such as fire hydrants or telephone or utility poles.

(2) Rural mailboxes.

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

(4) One or more curbs having a 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, regardless of size (such as a billboard), having a lower edge more than 15 feet (4.6 m) above the ground.

(2) Any uniformly smooth surface slanting away from the vehicle with a slope that is less than 45 degrees above the horizontal.

(3) Any surface slanting away from the vehicle 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 ground in the test site.

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

[40 FR 42437, Sept. 12, 1975, as amended at 41 FR 10227, Mar. 10, 1976; 54 FR 50385, Dec. 6, 1989]

§ 325.55 Ambient conditions; stationary test.

(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 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