Sec. 14-80a-8a. Site characteristics

(a) Microphone target point:

(1) Highway operations: Sound level measurements shall be made at a test site which is adjacent to and includes a portion of a traffic lane or public highway. A microphone target point shall be established on the center line of the traveled lane.

(2) Stationary test: The motor vehicle or snowmobile to be tested shall be parked on the test site and a microphone target point shall be established within three feet (.91 m) of the vehicle's exhaust system outlet(s) measured on the longitudinal centerline of the motor vehicle or snowmobile.

(b) **Microphone location point:** A microphone location point shall be established on the ground surface not less than 35 feet (10.7 m) and not more than 83 feet (25.3 m) from the microphone target point and on a line that is perpendicular to the center line of the lane on which the vehicle is located or operated.

(e) **Test site:** A plan view diagram of a standard test site which is enclosed within a 50 foot (15.2 m) radius surrounding both the microphone target point and the microphone location point, is shown in figure one. Within the test site is a triangular measurement area. Measurements may be made at a test site having smaller or greater dimensions in accordance with the requirements of section 14-80a-9a. The test site shall 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 mail boxes.

(3) Traffic railings of any type of construction except solid concrete barriers.

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

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

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

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

c. Any surface slanting away from the roadway that has a slope between 45 degrees and 90 degrees providing all points on this surface are more than 15 feet (4.G m) above the surface of the test lane or roadway.

The surface of the ground within the measurement area must be relatively flat. Sound level measurements may be made on either "soft" or "hard" test sites as defined in section 14-80a-1a.

For highway operations, the traffic lane of the highway within the test site must be dry, paved with relatively smooth concrete or asphalt, and substantially free of holes or other defects which would cause a motor vehicle to emit irregular tire, body or chassis impact noise. The traffic lane of any 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.

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