

**7030.0060 MEASUREMENT METHODOLOGY.**

Subpart 1. **Measurement location.** Measurement of sound must be made at or within the applicable NAC at the point of human activity which is nearest to the noise source. All measurements shall be made outdoors.

Subp. 2. **Equipment specifications.** All sound level measuring devices must meet Type O, I, II, or S specifications under American National Standards Institute S1.4-1983.

Subp. 3. **Calibration.** All sound level measuring devices must, at a minimum, be externally field calibrated before and after monitoring using a calibration device of known frequency and sound pressure level.

Subp. 4. **Measurement procedures.** The following procedures must be used to obtain representative sound level measurements:

A. Measurements must be made at least three feet off the ground or surface and away from natural or artificial structures which would prevent an accurate measurement.

B. Measurements must be made using the A-weighting and fast response characteristics of the sound measuring device as specified in American National Standards Institute S1.4-1983.

C. Measurements must not be made in sustained winds or in precipitation which results in a difference of less than ten decibels between the background noise level and the noise source being measured.

D. Measurements must be made using a microphone which is protected from ambient conditions which would prevent an accurate measurement.

Subp. 5. **Data documentation.** A summary sheet for all sound level measurements shall be completed and signed by the person making the measurements. At a minimum, the summary sheet shall include:

- A. date;
- B. time;
- C. location;
- D. noise source;
- E. wind speed and direction;
- F. temperature;
- G. humidity;
- H. make, model, and serial number of measuring equipment;
- I. field calibration results;

J. monitored levels; and

K. site sketch indicating noise source, measurement location, directions, distances, and obstructions.

**Statutory Authority:** *MS s 116.07*

**History:** *11 SR 43; 17 SR 1279; 18 SR 614*

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