**Section 910.102 Instrumentation**

a) Sound Measuring Equipment

1) Use an integrating sound level meter alone or in conjunction with an octave-band or ⅓ octave-band filter set or a real-time sound analyzer (octave-band or ⅓ octave-band) that complies with the following standards incorporated by reference at 35 Ill. Adm. Code 900.106:

A) ANSI/ASA S1.4-2014/Part 1/IEC 61672:1-2013 "American National Standard Electroacoustics – Sound Level Meters – Part 1: Specifications (a nationally adopted international standard)".

B) ANSI/ASA S1.11-2014/Part1/IEC 61260:1-2014 "Electroacoustics − Octave-Band and Fractional-Octave-Band Filters – Part 1: Specifications (a nationally adopted international standard)".

C) ANSI/ASA S1.6-2016 "Preferred Frequencies and Filter Band Center Frequencies, for Acoustical Measurements".

D) ANSI/ASA S1.8-2016 "Reference Values for Levels Used in Acoustics and Vibrations".

E) IEC 61672-1:2013 "Electroacoustics Sound Level Meters – Part 1: Specifications".

2) Use a magnetic tape recorder, graphic level recorder or other indicating device conforming with the SAE Recommended Practice J184 "Qualifying a Sound Data Acquisition System", August 2014, incorporated by reference at 35 Ill. Adm. Code 900.106.

3) Calibrate sound measuring equipment traceable to the National Bureau of Standards at least once every 12 months.

4) For outdoor measurement, use a microphone with an attached windscreen.

b) Weather Measuring Equipment

1) Us an anemometer and compass or other devices to measure wind speed and direction in compliance with the manufacturer's recommended procedures.

2) Use a thermometer, designed to measure ambient temperature, in compliance with the manufacturer's recommended procedures.

3) Use a hygrometer in compliance with the manufacturer's recommended procedures to measure the relative humidity.

4) Use a barometer in compliance with the manufacturer's recommended procedures to measure the barometric pressure.

(Source: Amended at 42 Ill. Reg. 20487, effective November 1, 2018)