**Section 900.103 Measurement Procedures**

a) Procedures Applicable to All of 35 Ill. Adm. Code: Subtitle H, Chapter I

The procedures for the measurement of sound under Subtitle H, Chapter I, except for Parts 900 and 901, must substantially conform to standards and recommended practices established by ANSI, ASA, IEC, or SAE, incorporated by reference at Section 900.106. The sound measurement procedures for 35 Ill. Adm. Code 900 and 901 must conform to 35 Ill. Adm. Code 910.

b) Procedures Applicable Only to 35 Ill. Adm. Code 901

1) All measurements and all measurement procedures to determine compliance with 35 Ill. Adm. Code 901, except for measurements to determine compliance with 35 Ill. Adm. Code 901.109, must be based on Leq averaging, as defined in Section 900.101, using a reference time as follows:

A) Except as specified in subsection (b)(1)(B) for steady sound, use a reference time of at least 1 hour for all sound measurements and measurement procedures.

B) For measurement of steady sound as defined in Section 900.101, use a reference time of at least 10 minutes.

2) All measurements and measurement procedures under subsection (b)(1)(B) of this Section must correct or provide for the correction of sound emissions for the presence of ambient or background noise in compliance with the procedures in 35 Ill. Adm. Code 910. All measurements must comply with the following ANSI standards, incorporated by reference at Section 900.106:

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

B) ANSI/ASA S1.6-2016 "Preferred Frequencies and Filter Bank Center Frequencies for Acoustical Measurements".

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

D) ANSI/ASA S1.13-2005 (R2010) "Measurement of Sound Pressure Level in Air".

E) ANSI S12.9-2013/Part 3 "Quantities and Procedures for Description and Measurement of Environmental Sound – Part 3: Short-Term Measurements with an Observer Present".

c) Procedures Applicable Only to 35 Ill. Adm. Code 902

1) To determine whether emissions of sound comply with 35 Ill. Adm. Code 902.120 through 902.123, use measurement procedures compliant with the following ANSI standards, incorporated by reference at Section 900.106:

A) ANSI 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 S1.13-2005 (R2010) "Measurement of Sound Pressure Level in Air".

2) The procedures for sound measurement under 35 Ill. Adm. Code 902.123 must conform to the ANSI standards prescribed in subsection (c)(1) and must comply with those established by the U.S. Department of Transportation at 49 CFR 325, as directed by Section 17 of the Federal Noise Control Act of 1972 (42 USC 4901 et seq.).

3) The Board may provide for measurement at distances other than the 50 feet specified in 35 Ill. Adm. Code 902.120 through 902.123, if correction factors are applied so that the sound levels so determined are substantially equivalent to those measured at 50 feet and the measurement distance does not exceed 100 feet. Use the correction factors consistent with California Highway Patrol Sound Measurement Procedures HPH 83.1 (October 1, 1973, as amended November 9, 1975), incorporated by reference at Section 900.106.

d) Procedures Applicable Only to 35 Ill. Adm. Code 905

1) To determine whether emissions of sound comply with 35 Ill. Adm. Code 905.102(a) and 905.103(a)(1), use measurement procedures compliant with the following standards, incorporated by reference at Section 900.106:

A) ANSI S1.4-2014/Part 1/IEC 61672:1-2013 "American National Standard Electroacoustics Sound Level Meters – Part 1: Specifications".

B) SAE Recommended Practice J192 "Exterior Sound Level for Snowmobiles", January 2013.

2) To determine whether emissions of sound comply with 35 Ill. Adm. Code 905.102(b) and 905.103(a)(2), use measurement procedures substantially compliant with the following standards, incorporated by reference at Section 900.106:

A) ANSI S1.4-2014/Part 1/IEC 61672:1-2013 "American National Standard Electroacoustics Sound Level Meters: Specifications".

B) SAE/ANSI Recommended Practice J1161 "Operational Sound Level Measurement Procedure for Snow Vehicles", April 2004.

(Source: Amended at 42 Ill. Reg. 20432, effective November 1, 2018)