CITY OF CHICAGO DEPARTMENT OF ENVIRONMENT

ENVIRONMENTAL NOISE AND VIBRATION CONTROL RULES AND REGULATIONS

Whereas, pursuant to Chapters 2-30 and 11-4 of the Municipal Code of Chicago (the "Code"), the Department of Environment (the "Department") is charged with enforcement of environmental regulations, including noise and vibration control, within the City of Chicago; and

Whereas, pursuant to the authority granted by Section 2-30-030 of the Code, the Commissioner of the Department of Environment (the "Commissioner"), is authorized to issue rules and regulations necessary or proper to accomplish the purposes of Chapter 11-4 of the Code, and is further authorized to make reasonable administrative and procedural regulations or rules interpreting or clarifying the requirements which are specifically prescribed in Chapter 11-4 of the Code; and

Whereas, this general rule-making authority includes any rules necessary to clarify the provisions of Article XXI of the Code, Sections 11-4-2700 through 11-4-2920, the "Chicago Environmental Noise Ordinance;" and

Whereas, in addition, Section 11-4-2720 of the Environmental Noise Ordinance gives the Commissioner authority to adopt regulations establishing preferred procedures for measuring sound pressure levels to demonstrate compliance or noncompliance; and Section 11-4-2810 authorizes regulations specifying uniform noise mitigation procedures for air handling units and refrigeration units; now, therefore,

I, Sadhu A. Johnston, Commissioner, Department of Environment, City of Chicago, issue the following rules and regulations pursuant to the authority granted to me by Sections 2-30-030, 11-4-2720, and 11-4-2810 of the Municipal Code of Chicago.

- 1.0 Scope and Purpose. The purpose of these rules and regulations is to provide explanatory details and procedural guidelines with regard to the enforcement of Article XXI, Environmental Noise and Vibration Control, Section 11-4-2700 et seq. of the Municipal Code of Chicago (the "Environmental Noise Ordinance").
- 2.0 **Sound Level Investigations.** Any person investigating an alleged violation of the Environmental Noise Ordinance shall be guided by the procedures set forth below. Any deviation from these procedures shall affect the weight but not the admissibility of the sound level determination.
- 2.0.1 <u>Audibility Determinations</u>. In order to establish compliance or noncompliance with any section of the Environmental Noise Ordinance imposing a standard based on "average conversational level" or audibility at a specified distance, the following guidelines shall apply.

A. *Without a sound level meter*. Where a sound level meter is not used, the determination shall be made:

- 1) Using normal, unaided hearing;
- 2) Standing at a distance from the source or property line as specified in the ordinance; and
- 3) For a period not less than ten minutes in order to determine the average noise level over a ten minute period.
- B. With a sound level meter. In addition to the audibility determination described above, a sound level meter measurement may be used as further proof to determine compliance or noncompliance under this section. If a sound level meter is used, then:
 - 1) The measurements shall be taken following the guidelines set forth in section 2.0.2 of these Rules and Regulations; and
 - 2) Average conversational level shall be deemed to be 60 dB(A).
- 2.0.2 <u>Decibel Level Measurements</u>. In order to establish compliance or noncompliance with any section of the Environmental Noise Ordinance imposing a decibel sound pressure level limit, the following guidelines shall apply.

A. Indoor Measurements. Where the ordinance specifies an indoor decibel level measurement, the measurement shall be taken:

- With a sound level meter using the "A" weighting network in compliance with specifications established by the "American National Standards Specification for Sound Level Meters" ANSI S1.4-1983 or the most recent revision thereof;
- 2) In an indoor room used for living space;
- 3) With a window open, unless the investigator determines that it is not practical or feasible to open a window;
- 4) Standing in a location that is most likely to provide a representative measure of the noise; and
- 5) For a period not less than ten minutes in order to determine the average noise level over a ten minute period.

- B. *Outdoor Measurements.* Where the ordinance specifies an outdoor decibel level measurement, the measurement shall be taken:
 - With a sound level meter using the "A" weighting network in compliance with specifications established by the "American National Standards Specification for Sound Level Meters" ANSI S1.4-1983 or the most recent revision thereof;
 - 2) Standing at a distance specified in the ordinance as measured from the property line of the property on which the source is located; and
 - 3) For a period not less than ten minutes in order to determine the average noise level over a ten minute period.

C. Ambient Noise Measurements. Where the ordinance, in Section 11-4-2805(a), specifies two alternate decibel standards, one of which is dependent upon the ambient noise level, the Commissioner or the Commissioner's designee will determine whether or not ambient noise levels are sufficiently high so as to make it difficult to take an accurate measurement of the noise source in question. If ambient noise is determined to be sufficiently high, then, pursuant to Section 11-4-2805(c) of the Code, enforcement personnel may request that the noise source be turned off in order to measure ambient noise levels without contribution from the noise source.

3.0 Air Handling and Refrigeration Units.

- 3.0.1 <u>Sound Level Measurements</u>. In addition to the procedures for sound level investigations set forth in section 2.0 of these Rules and Regulations, the following assumptions shall guide the Department in its response to complaints about noise from air handling units and refrigeration units ("unit"):
 - 1) Where one building supports more than one unit, each unit shall be treated as an individual noise source, unless the units are similar in type and size and have common ownership, in which case all units of common ownership shall be deemed to be a single unit.
 - 2) Where the Department determines that a unit conforms with the noise mitigation procedures set forth in section 3.0.2 below, the Department shall not take sound level measurements of the unit.
- 3.0.2 <u>Noise Mitigation Procedures</u>. In accordance with Section 11-4-2810 of the Code, if the owner of an air handling or refrigeration unit, other than a window air conditioning unit, has taken the following steps, the unit will be presumed to be in compliance with the Environmental Noise Ordinance:
 - 1) The unit is placed no less than ten (10) feet from any window in the nearest existing residential building;

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- 2) The unit displays an official EPA Energy Star label, and the unit's original product manual is available upon request by the Department;
- 3) The owner of the unit keeps the unit in good repair and causes the unit to be inspected and maintained by a certified heating, ventilation, air-conditioning, and refrigeration (HVAC/R) professional on a routine basis, at least annually; and
- 4) The unit contains a legible sticker, signed by a certified HVAC/R professional, indicating the date of the most recent maintenance inspection, and/or the owner of the unit produces an invoice or receipt signed by a certified HVAC/R professional, indicating the date of the most recent maintenance inspection.
- 4.0 Equitable Considerations. Because of limited resources and environmental enforcement priorities, the Department may not be able to take enforcement action for every alleged violation of the Environmental Noise Ordinance. Therefore, in exercising the Department's prosecutorial discretion and prioritizing use of available resources, the Commissioner or the Commissioner's designee may consider and weigh the following equitable factors:
 - the relative length of time the source of the alleged violation has existed in its current location as compared to the length of time the complainant has been in the area;
 - the proximity of the complainant's residence to the noise source, if the complainant's residence is farther from the noise source than the distance specified for sound level investigations;
 - 3) the relative level of ambient noise in the area of the alleged violation, if ambient noise is above the ordinance standard and the noise level of the source under investigation is close to the ambient noise level; and
 - 4) any steps the alleged violator has taken to remedy the alleged violation.

I, Sadhu A. Johnston, hereby promulgate the foregoing Environmental Noise and Vibration Control Rules and Regulations on this <u>J</u> day of January 2007.

Sadhu A. Johnston Commissioner of Environment City of Chicago

