ENVIRONMENTAL PROTECTION

OFFICE OF ENFORCEMENT POLICY

Noise Control

Proposed Amendments: N.J.A.C. 7:29-1.1, 1.2, 1.4, 1.5, 1.7, 1.8, 2.2, 2.32.4, 2.5, 2.6, 2.7, 2.8,

2.9, and 2.11

Proposed Repeals: N.J.A.C. 7:29-2.1 and 2.12

Authorized By: Shawn LaTourette, Commissioner, Department of Environmental Protection.

Authority: N.J.S.A. 13:1G-1 et seq.

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

DEP Docket No.: 04-25-05.

Proposal Number: PRN 2025-062.

The Department of Environmental Protection (Department) will hold a public hearing on July 7, 2025, at 6:00 P.M., until the close of public comment. The hearing will be conducted virtually through the Department's video conferencing software, Microsoft Teams, and will be recorded. A link to the virtual public hearing and a telephone call-in option will be provided on the Department's website at https://www.nj.gov/dep/rules/notices.html.

Submit comments by close of business on August 15, 2025, electronically at www.nj.gov/dep/rules/comments. Each comment should be identified by the applicable N.J.A.C. citation, with the commenter's name and affiliation following the comment.

The Department encourages electronic submittal of comments. In the alternative, comments may be submitted on paper to:

Amanda Parker, Esq.

Attention: DEP Docket No. 04-25-05

Office of Legal Affairs

New Jersey Department of Environmental Protection

401 East State Street, 7th Floor

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PO Box 402

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If you are interested in providing oral testimony or submitting written comments at the virtual public hearing, please email the Department at Michelle.Feasel@dep.nj.gov no later than 3:00 P.M., July 7, 2025, with your contact information (name, organization, telephone number, and email address). You must provide a valid email address so the Department can send you an email confirming receipt of your interest to testify orally at the hearing and provide you with a separate option for a telephone call-in line if you do not have access to a computer that can connect to Microsoft Teams. It is requested (but not required) that anyone providing oral testimony at the public hearing provide a copy of any prepared remarks to the Department through email.

This rule proposal may be viewed or downloaded from the Department's website at www.nj.gov/dep/rules.

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The agency proposal follows:

Summary

As the Department has provided a 60-day comment period on this notice of proposal, this notice is excepted from the rulemaking calendar requirement pursuant to N.J.A.C. 1:30-3.3(a)5.

The Noise Control rules, N.J.A.C. 7:29, implement the Noise Control Act, N.J.S.A. 13:1G-1 et seq. (Act). The Act provides, at N.J.S.A. 13:1G-2, that the people of New Jersey should be ensured an environment that is free from noise that unnecessarily degrades the quality of life; that the levels of noise in communities have reached a degree that endangers the health, safety, and welfare of the people of the State; and that this threat can be abated by the adoption and enforcement of noise standards.

The Act created a Noise Control Council (Council). See N.J.S.A. 13:1G-17. Among other responsibilities, the Council is authorized to study the codes, rules, and regulations promulgated by the Department regarding noise control and to make recommendations to the Commissioner of the Department for improvements. See N.J.S.A. 13:1G-18. The Council is also authorized to hold public hearings concerning existing noise control statutes and rules, as well as state of the art technical capabilities and limitations in noise control, and to report its recommendations to the Commissioner of the Department. See N.J.S.A. 13:1G-18. In addition, the Council has the authority to veto the adoption, amendment, or repeal of any rule before the Commissioner promulgates it. See N.J.S.A. 13:1G-18. The Council has reviewed and approved this rulemaking.

The noise control standards at N.J.A.C. 7:29 are based upon the impact that noise has on human health and are designed to prevent the deleterious physical effects that may result from exposure to excessive noise. Daytime sound levels are established based on whether a noise interferes with speech, and night-time levels are established based upon whether a noise interrupts sleep. "In the early 1970s, the Department of Health, the NJDEP, and the Council worked together to draft standards for the levels of sound emanating from stationary industrial and commercial operations. In 1974, the NJDEP promulgated these standards at N.J.A.C. 7:29, entitled, *Noise Control* (State Code). The standards developed are health-based and are designed to prevent the deleterious physical effects that may result from exposure to excessive noise. The standards were based on information dealing with speech interference and sleep interruption. Specifically, daytime sound levels were determined by speech interference criteria, while nighttime levels were dictated by sleep interruption information." (Derived from the New Jersey Register (42 N.J.R. 3024(a)) as part of the background information provided by NJDEP for the readoption of N.J.A.C. 7:29, December 20, 2010.)

County and municipal regulatory agencies typically monitor compliance with the Act and the Noise Control rules and conduct noise complaint investigations. These agencies include local health agencies certified by the Department pursuant to the County Environmental Health Act (CEHA), N.J.S.A. 26:3A2-21 et seq., to administer a noise control program, and municipal agencies that enforce noise control ordinances approved by the Department within their respective areas of jurisdiction. Local agencies are especially well suited to implement noise control programs as they are in relatively close proximity to complainants and are able to quickly investigate noise complaints.

The Department proposes to amend the Noise Control rules to consolidate definitions from N.J.A.C. 7:29-2 with those at N.J.A.C. 7:29-1 to provide a single location for definitions; amend definitions that are not sufficiently descriptive; and update measurement procedures and sound level measurement device requirements to reflect modern technology in broad use.

General Provisions

Definitions, N.J.A.C. 7:29-1.1

The Noise Control rules are divided into two subchapters. The first subchapter sets forth general provisions applicable to the entire chapter. The second subchapter sets forth the procedures for determining noise from stationary sources. Each subchapter has a definitions section. Existing N.J.A.C. 7:29-1.1 should include definitions relevant to the entire chapter, and existing N.J.A.C. 7:29-2.1 should include definitions specific to Subchapter 2. The Department has reviewed the definitions in both subchapters and determined that some of the definitions at N.J.A.C. 7:29-2.1 are used in both subchapters. Rather than maintaining two separate definition sections, the Department is consolidating the definitions into proposed amended N.J.A.C. 7:29-1.1, Definitions. Existing N.J.A.C. 7:29-2.1 is proposed for repeal, the remaining sections at Subchapter 2 are recodified, and cross-references throughout the chapter are updated.

Proposed amendments to definitions relevant to individual sections of the rules that the Department proposes to amend are discussed in the context of the amendments to those sections. Except as discussed below and in the summary of individual sections, the existing definitions at N.J.A.C. 7:29-2.1 are relocated to N.J.A.C. 7:29-1.1 without changes, except as necessary to preserve their meaning in light of the relocation.

In the definition of "commercial facility," the Department proposes to include condominiums at paragraph 9, which sets forth a list of establishments providing living accommodations. Pursuant to the existing rules, if the source of the sound is a living establishment with more than six units, and the sound comes from a heating, air conditioning, pool filter unit or system, or outdoor amplified sound system, then the establishment is considered a commercial facility, and is subject to the sound limits at N.J.A.C. 7:29-1.2. The Department proposes to rephrase the description of the sources of sound and limit them to sources that are owned or operated by the establishment. The sources would no longer be specific to certain types of equipment. Instead, the rules refer to them as "mechanical device," "electronic device," or "sound production device." Referring to the source based on these categories is more inclusive and will better protect residents from noise. All three of these devices are newly defined terms at N.J.A.C. 7:29-1.1.

In the definition of "community service facility," the Department proposes to specify that colleges and universities fall within the existing category of "public, private, and parochial schools." In addition, "health care facilities" replaces "hospitals" at paragraph 5, to be less limiting. The Department proposes to define "health care facility" as it is defined in the Health Care Facilities Planning Act, N.J.S.A. 26:2H-1 et seq. The definition in the Health Care Facilities Planning Act includes a facility or institution, whether public or private, that is engaged principally in providing services for health maintenance organizations, diagnosis, or treatment of human disease, pain, injury, deformity, or physical condition. These include, but are not limited to, a general hospital, special hospital, mental hospital, public health center, diagnostic center, treatment center, rehabilitation center, extended care facility, skilled nursing home, nursing home,

intermediate care facility, tuberculosis hospital, chronic disease hospital, maternity hospital, outpatient clinic, dispensary, home health care agency, residential health care facility, dementia care home, and bioanalytical laboratory (except as specifically excluded in the Health Care Facilities Planning Act), or central services facility serving one or more such institutions, but excluding institutions that provide healing solely by prayer, and excluding such bioanalytical laboratories that are independently owned and operated, and are not owned, operated, managed, or controlled, in whole or in part, directly or indirectly, by any one or more health care facilities, and the predominant source of business of which is not by contract with health care facilities within the State of New Jersey, and that solicit or accept specimens and operate predominantly in interstate commerce, N.J.S.A. 26:2H-2. Proposed amended N.J.A.C. 7:29-1.2 applies, in part, to sound emanating from, and measured at, community service facilities. As is evident from the Health Care Facilities Planning Act, health care is provided at far more types of facilities than just hospitals; therefore, a narrow application of the permissible sound level limits to only those health care facilities that are hospitals ignores the health impacts that excessive sound levels may have when measured at, or from, facilities that provide similar care to a hospital, but are not actually hospitals.

The Department proposes to remove the term "non-residential" from the definition of "community service facility." Not all community service facilities are non-residential, as is evident from the definition of "residential property." The existing definition of "residential property" includes a "community service property used for human habitation," indicating that some community service facilities (or properties) fall within the definition of residential properties. The proposed definition of community service facility references the exceptions listed in the residential

property definition. For consistency between the two definitions, the Department proposes to replace "community service property" with "community service facility" in the definition of "residential property." Within the definition of "residential property," the Department proposes to identify specific examples of residential components of what would otherwise be community service facilities. For purposes of measuring sound at a receptor in accordance with the permissible sound level limits at proposed amended N.J.A.C. 7:29-1.2, these otherwise community service facilities are considered residential properties. This will result in the nighttime sound limits applying to these facilities. Proposed amendments to the definition of "residential property" are intended to clarify the definition. The existing definition could be interpreted as providing a list of conditions of employment, rather than examples of residential properties. "Campground" is added as an example of a recreational and entertainment property used for human habitation.

The definition of "duty cycle" is changed from the existing definition at N.J.A.C. 7:29-2.1. The proposed definition does not limit the duty cycle to periodically cycling at a regular rate. This is a more accurate definition, as there are instances in which a duty cycle can be irregular. In addition, the proposed language will state that a duty cycle can "include varying conditions of load or operation" with the example of an HVAC unit responding to fluctuating demand with variable speed fans.

The definition of "electricity generation" is proposed to be deleted from the chapter as it is a commonly understood term and is used only in the definition of "industrial facility."

The proposed amended definition of "emergency" no longer requires the prompt action and response to be that of emergency services personnel, or contractors working at the site of the emergency to address an emergency. During an event that otherwise qualifies as an emergency,

the response need not be limited to emergency services personnel or contractors. The existing definition refers to a cause that "endangers or has the potential to endanger the health, safety or resources of citizens, or a municipality." This lacks clarity, in that it could be interpreted as referring to a cause that endangers the health, safety, or resources of a municipality, or to the municipality itself. The proposed amended definition is clearer and refers to a cause that endangers a public or private facility, or endangers the health, safety, or resources of citizens.

The proposed amended definition of "emergency energy release device" identifies a pressure release valve as an example of an emergency energy release device.

"Extraneous sound" and "neighborhood residual sound level" are among the proposed definitions relocated from N.J.A.C. 7:29-2.1. The Department proposes to amend these definitions to make it clear what distinguishes the two from each other, with examples included. "Extraneous sounds" are described as "intermittent" and exemplified by car horns, aircraft, and transient birds. "Neighborhood residual sounds" are described as "consistent but not necessarily continuous," exemplified by consistent off-site traffic of properly muffled vehicles, seasonal insects, or a flock of non-transient birds. For consistency between the two definitions, in "neighborhood residual sound levels," the term "source of interest" is replaced with the term "source property under investigation," as used in "extraneous sounds." It is important these two definitions be consistent, yet distinguishable, as extraneous sounds are excluded from all sound level measurements, while neighborhood residual sounds are included in all sound level measurements.

The definition of "facility" is not carried over from existing N.J.A.C. 7:29-2.1 and is, therefore, proposed for repeal. The term "facility" is used throughout the chapter with various

meanings, depending on the context. Removing the definition enables the term to be used as a common term and eliminates conflicts in its use within the chapter.

The existing definition of "maximum sound level" does not properly describe the technology used to measure sound. The definition includes only two of the sound level meter's response settings: "fast" or "impulse." Sound level measurements may be conducted with the meter response set for "slow," "fast," or "impulse" under different circumstances, and the maximum sound level is reported under all settings. The proposed amended definition removes the reference to these two limiting settings.

The definition of "noise" was carried over from existing N.J.A.C. 7:29-2.1 and, in doing so, the reference in the definition "for the purposes of this procedure" was no longer necessary. This broadens the definition to apply to the chapter.

The proposed definition of "octave band" is changed from the existing definition at N.J.A.C. 7:29-2.1. The definition of "octave band" is modernized for current standards and updated to reflect the ANSI definition and the use of this term within N.J.A.C. 7:29. The definition of "octave" is not carried over from existing N.J.A.C. 7:29-2.1 and is, therefore, proposed for repeal. Octave is only used in the context of octave band. The definition of "sound spectrum" is not carried over from existing N.J.A.C. 7:29-2.1 and is, therefore, proposed for repeal. This term is not used in the amended rule text, it was only used in the existing definition of "octave band."

The existing rules refer to both the source and receptor of noise as a "person." The proposed new definition of "responsible entity" refers specifically to the person causing or controlling a source of sound. In contrast, the existing definition of "affected person" refers to the complainant. The Department proposes to substitute the appropriate terms throughout the chapter.

In the definition of "person," "municipality" is deleted as redundant. A municipality falls within the existing term "political subdivision."

The definitions of "sound level," "sound level meter," and "sound pressure level" are amended for grammar and consistency within the chapter, specifically with the use of "A-scale" instead of "A-weighting" and to include the new term "dBZ." The proposed definition of "sound level meter" is similar to the existing definition at N.J.A.C. 7:29-2.1; however, the proposed definition uses the word "equipment," rather than "instrument." The Department proposes this same substitution throughout the chapter. The proposed definition of "sound level meter" does not refer to N.J.A.C. 7:29-2.6(a)1 (recodified as N.J.A.C. 7:29-2.5(a)1), as the existing definition at N.J.A.C. 7:29-2.1 does. Existing N.J.A.C. 7:29-2.6(a)1 dictates how measurements should be taken using the equipment and is unnecessary to the definition.

The definition of "total sound level" differs grammatically from the existing definition at N.J.A.C. 7:29-2.1. The substance of the definition is the same.

Permissible Sound Level Limits, N.J.A.C. 7:29-1.2

The Department proposes to change the heading at N.J.A.C. 7:29-1.2 to "Permissible sound level limits" to better reflect the purpose of the section. The proposed amended section identifies the chapter's applicability to categories of sound sources and sound receptors. This is consistent with the Department's Model Noise Ordinance and makes clear to what types of facilities to which the chapter applies.

The existing rule states, at N.J.A.C. 7:29-1.2(a), that the limits in the section are measured "at" any residential property line of any affected person, while N.J.A.C. 7:29-2.5(a)2 (recodified

as N.J.A.C. 7:29-2.4(a)2) states that noise investigators may conduct those measurements "at or within" that property line depending on the circumstances. Proposed amended N.J.A.C. 7:29-1.2(c) specifies that sound is to be "measured at or within" the residential property line of the affected person, for the purposes of consistency, and to bring clarity to the provision within which the permissible limits are established.

The octave band limits throughout N.J.A.C. 7:29 are to be measured in unweighted decibel units. Accordingly, the Department proposes to identify dB (decibels) and dBZ (the unit of sound level measured on the Z scale) where the rule refers to octave band sound pressure level in decibels.

Stationary Emergency Signaling Devices, N.J.A.C. 7:29-1.4

Existing N.J.A.C. 7:29-1.4 establishes sound-based standards for testing and operation of stationary emergency signaling devices. These include the hours during which a test of the devices may take place, limitations on the use of the devices, and proximity to elementary schools and playgrounds. The existing rule addressed only the "electromechanical functioning" of the device. Most modern stationary emergency signaling devices are wholly electronic, rather than electromechanical. By removing the "electromechanical" limitation, the rule is more generic and applies to all types of stationary emergency signaling devices.

The Department proposes to amend the definition of "stationary emergency signaling device" at N.J.A.C. 7:29-1.1. Rather than identify several categories of individuals who are "local persons engaged in local emergency operations," the proposed amended definition refers to "emergency service personnel," generally. Also, because the stationary emergency signaling

device also serves as a warning to the public, the proposed amended definition includes alerting the public, as one of the purposes of the device, which is consistent with N.J.A.C. 7:29-1.4.

The Department proposes to reword N.J.A.C. 7:29-1.4(a) to make it clear that the testing of the device can take place no more than once per day and clarifies that the testing must occur on a regular schedule (for example, weekdays at noon). The 10-second limit on the duration of the test remains, as in the existing rule; however, the proposed amended rule allows a longer duration for testing after repair or replacement. If testing is of the complete emergency signaling system (not just the stationary emergency signaling device), then proposed amended N.J.A.C. 7:29-1.4(b) limits the duration to the minimum time necessary to determine that the system is operating properly.

Existing N.J.A.C. 7:29-1.4(c) restricts the use of a stationary emergency signaling device for purposes other than testing the system to "emergency purposes where personnel and equipment are mobilized," specifically allowing the device to be used to announce school closings resulting from a weather emergency. This language unnecessarily limits the use of the device. Pursuant to the proposed amended rule, the stationary emergency signaling device may be used for an emergency. The term "emergency" is defined and provides for a broader set of circumstances than the existing provision.

Existing N.J.A.C. 7:29-1.4(f) includes redundant language: the second sentence repeats much of the first sentence. The first sentence recites the caveat of the Noise Control Act, N.J.S.A. 13:1G-4.2. The last sentence identifies the relevant Federal Emergency Management Agency publications related to testing stationary emergency devices. The proposed amendments preserve the meaning of the existing rule and maintains the Department's emphasis from the 1995 proposal

of the subsection that, by the terms of the Noise Control Act, the rule pertains only to the use of stationary emergency signaling devices to alert local emergency services personnel and/or local citizens of a local emergency. 27 N.J.R. at 1093. The proposed amended definition of "emergency" makes the example of a fire unnecessary.

Existing N.J.A.C. 7:29-1.4(g) excepts dual-purpose stationary emergency signaling devices from "N.J.A.C. 7:29-1.3(d), (e), and (f)." The reference to N.J.A.C. 7:29-1.3 is an error. Existing N.J.A.C. 7:29-1.3 governs railroad noise, which is not relevant to stationary emergency signaling devices. The incorrect citation results from the recodification of the section from N.J.A.C. 7:28-1.3 in 2007 (38 N.J.R. 2774(a); 39 N.J.R. 3372(a)). The proposed amendment corrects the error.

Exceptions, N.J.A.C. 7:29-1.5

N.J.A.C. 7:29-1.5 provides exceptions to the operational performance standards (sound limits) in the chapter. The Department proposes to change the word "noise" to "sound" where sound is yet to be determined to be a violation. The Department proposes to replace "exceptions" with "exemptions" throughout the subchapter. The sound sources listed in the rules are exempt from the sound limits; accordingly, "exemptions" is the more appropriate term. Among the exceptions are agricultural activities. The Department proposes to amend the definition of "agricultural activities" to remove the word "farmlands," which is undefined in the rules. The proposed amended definition limits the activities at N.J.A.C. 7:29-1.5(a)1 to only those that take place on a "commercial farm," as that term is defined in the Right to Farm Act, N.J.S.A. 4:1C-1 et seq. According to the Legislature, as expressed at N.J.S.A. 4:1C-2.e, the Act is intended to

establish the policy of this State to protect "commercial farm operations from nuisance action, where recognized methods and techniques of agricultural production are applied, while, at the same time, acknowledging the need to provide a proper balance among the varied and sometimes conflicting interests of all lawful activities in New Jersey." The Department intends similar protections for commercial farms at N.J.A.C. 7:29-1.5(a)1. To the extent that the noise source is the operation of agricultural activities on a commercial farm, the sound level limits at N.J.A.C. 7:29-1.2 do not apply. However, if the sound source is on the commercial farm, but is not from an agricultural activity, the sound level limits do apply.

The proposed amended definition provides that operation of a sound production device is not an agricultural activity. The proposed addition to the definition addresses a relatively new sound source on commercial farms that is not related to agricultural activities. The new sound source is the operation of a sound production device (for example, musical instrument, loudspeaker, radio, public address system, musical player, or sound amplification system). Live or recorded music and/or announcements using a public address system are typically associated with an event, such as a wedding, party, contest, festival, or concert. As the use of a sound production device is not an agricultural activity, the sound resulting from such a device is not excepted from the rules, even though the sound emanates from a commercial farm.

The Noise Control Act at N.J.S.A. 13:1G-4.e authorizes the Department to promulgate rules for "[a]ccessory provisions which prohibit the use of machines or vehicles without noise quieting devices and materials such as mufflers, insulation or isolators ..." Proposed amended N.J.A.C. 7:29-1.5(a)1 requires that farm equipment and vehicles be properly maintained with a muffler and/or sound reduction device, in good working order, to ensure they are operated in a

manner that does not result in unnecessary noise, in order to qualify for the rule's exception for agricultural activities.

The existing rule states that noise from aircraft flight operations are exempt. The proposed rule removes "flight" to clarify that all aircraft operations are exempt. This is consistent with how enforcement has been conducted historically.

The existing rule excepts "public celebrations" that are government-sponsored or government-permitted events from the sound limits at N.J.A.C. 7:29-1.2. The Department proposes to clarify the criteria for an event to be considered a "public celebration," to be an event, such as a festival or a parade that commemorates a special occasion and is authorized by a government body. The event must be not-for-profit, open to the public, and, if a fee is charged, the fee may be used only to offset the expenses directly associated with the event. The Department does not intend this exception to allow private parties or events on public property to be noisy and affect nearby residents.

The existing rule refers to the exemption of railroad operations. The Department proposes to remove "the noise sources in question are" to simplify its language. This proposed change will not impact how enforcement will be conducted.

Existing N.J.A.C. 7:29-1.5(a)12 refers to the 1960 Explosives Act. This statute was repealed. The proposed amendment updates the cross-reference.

The existing exception at N.J.A.C. 7:29-1.5(a)13 applies to "normal operation" of a firearm range. The word "normal" in this context is subjective and does not convey useful information; therefore, the Department proposes to refer only to the operation of the range.

The Department proposes a new exception for sounds from wildlife not under the control of the person. Pursuant to the proposed exception, the sounds from such wildlife will not be attributable to the person. Examples of wildlife are undomesticated animals, migratory birds, insects, and reptiles living on or passing through the property. Noise from penned animals at a zoo or in a dog kennel are attributable to the facility and are not subject to the proposed exception.

The Department also proposes to add an exception for unamplified musical bands during scheduled extramural events at academic institutions. Marching bands have traditionally been afforded protection pursuant to the existing "public celebration" exception. The proposed amended exception for public celebrations does not apply to the types of events where marching bands are traditionally found, such as high school football games. The proposed amendment preserves the exception for marching bands.

Enforcement, N.J.A.C. 7:29-1.7

Existing N.J.A.C. 7:29-1.7 governs enforcement and imposition of civil penalties for violations of the Noise Control Act and the Noise Control rules. Existing N.J.A.C. 7:29-1.7(f) provides the criteria a violation must meet in order to be considered minor, and, thereby, potentially eligible for a grace period to achieve compliance pursuant to N.J.A.C. 7:29-1.7(d)2i. The existing rule, by using "and" between paragraphs (f)1 and 2, already requires both conditions to be met. Nevertheless, the Department proposes to amend the subsection by adding that "both the following conditions are met" before listing the criteria, to make it clear that only a violation that meets both criteria may be eligible for a grace period.

Procedures for the Determination of Noise from Stationary Sources

Operating Conditions During the Investigation, N.J.A.C. 7:29-2.4

Recodified N.J.A.C. 7:29-2.3 specifies the conditions through which the enforcement entity will measure the sound under investigation. A noise investigator does not "test" for noise, but instead "investigates" it. Therefore, the proposed new heading for the section refers to conditions during the investigation. The existing rule provides that the sound source must be operating at normal and routine conditions and, as necessary, at other conditions. The rule identifies the time frames for the operating conditions to be "from 7:00 A.M. to 10:00 P.M. and from 10:00 P.M. to 7:00 A.M." The time frames coincide with the timeframes at N.J.A.C. 7:29-1.2(a)1 and 2, which specify daytime and nighttime sound levels. The Department proposes to remove these examples of conditions, as well as the specified timeframes. Instead, because investigators need to measure the sound source during conditions that are representative of the complaint, the proposed amended rule requires the measurement to be taken under conditions that are representative of the complaint, to the extent feasible.

General Requirements, N.J.A.C. 7:29-2.5

Recodified N.J.A.C. 7:29-2.4 provides general requirements applicable to all sound measurements pursuant to the chapter. The Department proposes to amend the requirements for clarity and to be consistent with current science and protocols. Where there is a provision in the rules to govern how a specific action at proposed amended N.J.A.C. 7:29-2.4 is to be performed, the Department proposes to add a citation to that provision. For example, proposed amended N.J.A.C. 7:29-2.4(a) requires the investigator to confirm the facility under investigation is the

responsible entity and identify all sources contributing to neighborhood residual sound and extraneous sound to the point of measurement. Proposed N.J.A.C. 7:29-2.7(a) provides the instructions for surveying the relevant sounds and ensuring consistency with proposed N.J.A.C. 7:29-2.4.

Recodified N.J.A.C. 7:29-2.4(a)1 refers generally to the identification of sources. The proposed amended rule clarifies those sources as neighborhood residual and extraneous.

Recodified N.J.A.C. 7:29-2.4(a)2 states that measurements shall be taken within the property line of the affected person. The proposed amended rule specifies that the measurement within the property line is of total sound and provides a citation to the procedure for measuring total sound. Proposed new N.J.A.C. 7:29-2.4(a)3 prescribes the method for measuring neighborhood residual sound.

The Department proposes to delete existing N.J.A.C. 7:29-2.5(a)3 and replace it with N.J.A.C. 7:29-2.4(a)4. The existing rule states the measuring device must be calibrated before and after each series of readings. The "measuring device" referred to is the "sound level meter." An investigator in the field conducts a "field calibration check" prior to, and after, taking a measurement. The field calibration check is the investigator's determination that the meters are calibrated properly. The existing rule requires "calibration" before and after the measurement, and at least once every hour. An hourly field calibration check is not necessary; in fact, many sound measurements do not take an hour to complete. It is sufficient for the investigator to ensure the calibration of the equipment before and after the measurement. The Department proposes a similar amendment at N.J.A.C. 7:29-2.9(b)1ix. Throughout the chapter, the Department proposes to replace "calibration" with "field calibration check," where the latter term is more appropriate.

Recodified N.J.A.C. 7:29-2.4(a)5 states that the sound level meter and the calibrator must be "recalibrated" at least once per year. It is more accurate to say that the equipment must be "laboratory certified," as stated in the proposed amended rule. The Department proposes adding a third institution, the ANSI National Accreditation Board, to accredit laboratories to perform calibrations. The ANSI National Accreditation Board has a rigorous accreditation program in line with the two current choices, the American Association for Laboratory Accreditation and the National Institute of Standards and Technology. This inclusion will expand the number of qualified laboratories at which agencies and investigators may seek to have their sound measurement equipment certified. The existing rule also requires that a copy of written documentation of annual recalibration be kept with the equipment. The Department proposes to delete the requirement as it is unnecessary.

Existing N.J.A.C. 7:29-2.5(a)5iv prohibits outdoor measurements when the ambient temperature is below 14 degrees Fahrenheit, or above 122 degrees Fahrenheit. Technological advances have made it possible for some sound measurement equipment to take an accurate measurement at those temperatures. Proposed new N.J.A.C. 7:29-2.4(a)6iv refers to the range of accuracy of the equipment, rather than a specific range in ambient temperature.

Equipment, N.J.A.C. 7:29-2.6

The Department proposes, at recodified N.J.A.C. 7:29-2.5, to update the American National Standards Institute (ANSI) specifications for sound level meters, calibrators, and other equipment, and add International Electrical Commission (IEC) standards. ANSI is the organization that oversees standards and conformity assessment activities in the United States. In

contrast, the IEC is the world's leading organization for the preparation and publication of international standards for all electrical, electronic, and related technologies. Some equipment manufacturers (mostly those which are international) reference only the IEC standard and not the ANSI. The proposed definitions of "IEC" and "ANSI" identify the organizations, provide websites where the relevant standards are available, and indicate that the IEC and ANSI standards cited by the proposed rules are incorporated into the rules by reference, as supplemented or amended. Therefore, if ANSI or IEC updates a standard to which the rules refer, the updated standard becomes part of the rules without further notice or rulemaking. As a result of these proposed definitions, existing N.J.A.C. 7:29-2.12, Incorporation by reference, is no longer necessary and is repealed.

Existing N.J.A.C. 7:29-2.6(a)3iii is an optional list of equipment, such as a miner's lamp or a compass, that can be used during a noise investigation. Anything "optional" does not need to be stated in the regulations. Therefore, the Department proposes to delete the subparagraph. Instead, optional equipment will be addressed in the Rutgers Noise Enforcement Certification Training Classes and in the guidance manual posted on the County Environmental Health Act Network Portal. However, the removal of certain equipment currently listed as "optional" in the existing rule has no bearing on whether such equipment may be necessary under certain circumstances. For example, while a thermometer or temperature meter would be useful equipment for the inspector to have on site of the investigation, the temperature can be obtained by other means (for example, weather apps).

Reporting Requirements, N.J.A.C. 7:29-2.7

For each investigation of sound, the individual conducting the investigation must prepare a report. The Department proposes to amend the rule to conform to proposed amendments discussed elsewhere in this rulemaking (for example, field calibration check instead of calibration), and to add references to the relevant portions of the amended rules.

Proposed recodified N.J.A.C. 7:29-2.6(b)5 requires the investigator to record the ambient temperature at the location where the measurement is taken. Recording the temperature gives the report greater credibility, otherwise, a question could be raised as to whether the measurements were taken outside the meter's working parameters. The existing rule requires the ambient temperature to be recorded only if it is below 14 degrees Fahrenheit.

Recodified N.J.A.C. 7:29-2.6(b)8 requires the report for each test to include the date each piece of equipment was last recertified or recalibrated by the manufacturer or other approved person. As discussed above with regard to proposed amended N.J.A.C. 7:29-2.4, equipment is laboratory certified annually. The Department proposes to replace the reference to recertification or recalibration with a reference to proposed N.J.A.C. 7:29-2.4(a)4.

The existing rule requires the investigator to record the duty cycle of a sound source. Proposed recodified N.J.A.C. 7:29-2.6(b)9 requires the investigator to record the duty cycle only if applicable. Not all sound sources have duty cycles.

Recodified N.J.A.C. 7:29-2.6(b)10 refers to the total sound level in "dBA peak." The term "peak" can mean different things for different meters, which can cause confusion. The Department proposes to remove the term wherever it appears in the rules. Recodified N.J.A.C. 7:29-2.6(b)10, 11, and 12 refer to the measurement point of a sound. "Point" is not a word used to describe a

placement. "Location" is the more appropriate word. Further, if measuring octave bands, dB or dBZ should be used. The proposed amendments make these corrections.

When an investigator measures a sound, the investigator must provide a sketch of the site in conformance with the requirements at recodified N.J.A.C. 7:29-2.6(b)12. The Department proposes to expand the requirements to include the location of the affected persons, neighborhood residual sources, and adjacent structures. Otherwise, the proposed language is consistent with the existing rule in that the sound source under investigation correlates to the facility of interest, relevant distances correlate to property boundaries, and measurement locations are the same as the points of measurement.

Recodified N.J.A.C. 7:29-2.6(b)13 and 14 require the report to include a description of the sound sources by character and location. Proposed amendments clarify that the report must describe both the sound sources under investigation, as well as neighborhood residual and extraneous sounds.

Sound Testing Procedure, N.J.A.C. 7:29-2.7

Pursuant to the existing rules, N.J.A.C. 7:29-2.8, Preparation for testing, and 2.9, Procedure, are separate sections, although both address steps to be taken during a field investigation. The Department is proposing to combine them at recodified N.J.A.C. 7:29-2.7, Sound testing procedure.

Recodified N.J.A.C. 7:29-2.8(a) requires the investigator to survey the site prior to taking measurements. The proposed amended rule makes it clear that the investigator must identify the sound source under investigation, as well as the neighborhood residual and extraneous sound

sources, but this need not necessarily be completed prior to all measurements. If the investigator has reason to believe that the sound source under investigation is transient or may engage in evasive behavior, the investigator may take some initial measurements upon arrival on site. The investigator must then confirm the source and may conduct additional measurements, if possible and warranted.

Recodified N.J.A.C. 7:29-2.6(b) applies to the nature of the sound under investigation. The existing rule requires the investigator to ascertain whether the sound is steady state or extraneous. "Steady state" and "extraneous" are not terms used to describe a sound under investigation, nor do they have an impact on the investigative methodology. The Department proposes to replace the terms "steady state or extraneous" with the consequential terms "continuous or impulsive," which dictate the appropriate investigative methodology and permissible limits. Further, the Department is proposing to delete the definition of "steady state sound," as it has no regulatory relevance. What is relevant and must be ascertained by the investigator is whether the duration of sound emissions is more than one second (continuous sound) or less than one second (impulsive sound). Extraneous sounds cannot be from the source under investigation, by definition. However, sounds from a source under investigation can be impulsive.

Existing N.J.A.C. 7:29-2.8(d) states that equipment capable of octave band measurements should be selected when there is a narrow band of frequencies. The previous sentence stated that "the investigator shall select the appropriate measuring equipment pursuant to the requirements set forth in N.J.A.C. 7:29-2.5." The referenced section provides the requirements for octave band setting, making the final sentence unnecessary. As discussed above, the term "peak" may cause

confusion; therefore, the Department proposes to remove the statement about "impulse peak measurement."

Existing N.J.A.C. 7:29-2.9 provides the procedure for investigating a sound source. The Department proposes to delete the step-by-step guide to field calibration of a sound level meter at subsection (a). As discussed above, the investigator does not calibrate the sound level meter in the field but instead checks that the meter is properly calibrated. The proposed amended rule reflects that distinction. Different models or types of sound level meters require different field calibration check procedures, which would render the instructions inapplicable in some cases. As amended, the rule directs the investigator to follow the procedure for a field calibration check and any necessary adjustments, as prescribed by the manufacturer of the equipment.

Existing N.J.A.C. 7:29-2.9(b) provides the procedure for measuring the sound. The existing rule uses terms that are not applicable to the most recent generation of sound measurement equipment. The proposed amended rule, recodified as N.J.A.C. 7:29-2.7(f), refers instead to "unweighted flat-scale, linear-scale, or Z-scale, as well as "A-scale." The Department proposes to amend the definition of "A-weighted sound level" to instead define "A-scale," the more appropriate term. The proposed amended definition is reorganized for clarity, but is substantively the same as the existing definition. The unit of sound measured on the A-scale is "dBA"; the proposed amended definition of "dBA" refers to a sound level meter using the dBA setting, rather than the A-weighting setting. The Department also proposes a new definition of "Z-scale" to distinguish from A-scale, and to add a definition of dBZ, which is the abbreviation for the unit of sound level measured on the Z scale. Where appropriate, the Department proposes to insert the

new terms throughout the chapter. The procedure will be updated from "weighting position" to "weighting setting."

Recodified N.J.A.C. 7:29-2.7(f)iii provides instructions for measuring continuous sound and directs that the range switch must be set to the range in which the meter display reads nearest to the maximum end of the scale, and when selecting the proper range setting for making the measurement. The Department proposes to delete the reference to the range settings. The present generation of meters have a wider range than the meters available when the rule was promulgated, such that an investigator may not need to use a range setting.

Recodified N.J.A.C. 7:29-2.7(f)iv requires that octave band analysis is to be used as a supplement to A-weighted measurements. The Department proposes to delete this requirement because an A-weighted measurement and an octave band measurement may be conducted either separately or in conjunction with each other. The existing rule states (does not use "A"-scale) that this phrasing is proposed to be removed because the proposed rule states that flat-scale, linear-scale, or Z-scale must be used. There is no need to state that the A-scale setting does not need to be used.

Recodified N.J.A.C. 7:29-2.7(f)v describes how to measure impulsive sound. This section is inconsistent with the definition of continuous sound. The proposed definition of "continuous airborne sound," like the existing definition, provides that impulsive sounds that are rapidly repetitive over a duration of one second or longer shall be measured as a continuous airborne sound. When impulses are "numerous," it is not necessary to measure each one. The definition is amended for clarity and grammar.

Pursuant to recodified N.J.A.C. 7:29-2.7(f)vi, an investigator must postpone a sound level measurement if there is extraneous noise that increases the meter reading. The only exception was if the source of the extraneous sound was located on the facility under investigation. However, extraneous sound must always be excluded from the measurements, regardless of where it originates. Therefore, the Department proposes to delete the exception for on-site extraneous sound.

Recodified N.J.A.C. 7:29-2.7(f)vii describes how to investigate when the sound level varies with "altitude." The Department proposes to replace "altitude" with "elevation." The existing rule suggests that when the sound varies with altitude, the investigator could connect the sound level meter to its microphone and long cable attached to a long pole. The proposed amended rule removes the requirement to use specific equipment and procedures, allowing the investigator the flexibility to address various circumstances they may encounter at the time of the measurements. The Department proposes to provide the option to take measurements at the window of the affected person, since the location of the exposure of the affected person to the sound is relevant.

Recodified N.J.A.C. 7:29-2.7(f)ix provides that wind gusts greater than 12 miles per hour (mph) that occur after one hour of measurements will not invalidate the measurements already taken. As it does not matter how long into the investigation 12 mph wind gusts begin, the proposed amended rule provides that periodic wind gusts greater than 12 mph will not invalidate measurements taken during periods when sustained wind speeds remain at or below 12 mph. Wind speeds greater than 12 mph can result in greater than true sound levels. However, if wind gusts occasionally exceed 12 mph while sustained wind remains at or below 12 mph and measurements

are conducted during periods when wind gusts do not exceed 12 mph, then the measured levels are not negatively affected and remain valid.

Calculations, N.J.A.C. 7:29-2.10

Existing N.J.A.C. 7:29-2.10 provides the method for an investigator to correct the total sound level by subtracting the neighborhood residual sound, to determine the sound level from the source of interest. Existing Table 1 lists the sound level difference (A) and its correction factor (B). When the correction factors are calculated using logarithmic subtraction of the given sound difference, some of the calculated factors differ from those on the table. The Department proposes to amend these numbers in column B of Table 1 to the correct, calculated values. All values are to the 10th decimal place for consistency.

Qualifications of Enforcement Personnel, N.J.A.C. 7:29-2.11

The existing rules at N.J.A.C. 7:29-2.11 (recodified as N.J.A.C. 7:29-2.9) establish the necessary qualifications for enforcement personnel. The section outlines the training requirements for noise investigators. They must successfully complete an initial certification course that consists of a series of lectures followed by a field exercise and practical exam. Subsequent recertifications, required every 24 months, consist of a series of refresher lectures followed by a field exercise and a practical exam. The Department may grant a recertification extension on a case-by-case basis, if a request is made in writing. The Department has established a form for an extension request that is available on the Department's noise control website. The Department proposes an automatic extension of the investigator's certification if the recertification course is canceled. The duration

of the automatic extension, like the case-by-case extension, is for the period until the recertification course is next offered. Except for the automatic extension, a request for extension must be submitted to the Department at least 10 days prior to the expiration of the person's certification. However, the Department will consider a request that is submitted closer to the expiration date, provided the person presents documentation of an emergency or extenuating circumstances that precluded a timely submission. A certification remains valid for the duration of the extension. The Department proposes to update the name of the "Department of Environmental Sciences of Cook College" to "Rutgers, the State University of New Jersey." The existing rule limits the training to what Rutgers offers. The proposed amended rule provides that another Department-approved institution may provide training. Approved institutions can be found on the Department's noise control website. This amendment gives the Department some flexibility in the event that Rutgers is unable to provide training.

Miscellaneous Amendments

Throughout the chapter, the Department proposes amendments to correct grammar and punctuation.

Social Impact

The Department anticipates that the rulemaking will continue the positive social impact of the existing rules. The rules establish specific permissible noise limits in order to prevent, prohibit, and provide for the abatement of excessive and unnecessary noise, so as to protect the health, safety, and general welfare of the residents of New Jersey. Excessive and unnecessary noise can

cause adverse psychological and physiological effects on humans, including hearing loss, cardiovascular and gastrointestinal impacts, sleep disruption, and cognitive impairment, amongst other impacts (Basner M, Babish E, *et al.* Auditory and non-auditory effects of noise on health. The Lancet 2014;383:9925:1325-1332; Muzet A. Environmental noise, sleep and health. Sleep Med Rev 2007;11:135-42. Van Kamp I and Davies H. Noise and health in vulnerable groups, A review. Noise & Health. 2013;15:64:153-159). Noise exposure can deprive people of the peaceful enjoyment of their private property while also having the potential to result in annoyance, aggression and violent crime (Hener T. Noise pollution and violent crime. J Pub Econ 2022;215:104748).

The proposed rules are technical in nature and designed to clarify existing enforcement protocols and the protections afforded, the result being a reduction of noise exposure for New Jersey residents.

Economic Impact

The Department anticipates that the proposed rulemaking will have no economic impact. The Department is not modifying the substance of the existing rules. Therefore, there will be no new costs to comply with the rules, nor will there be savings. The existing economic benefits from control of noise, such as reductions in health-related costs associated with excessive noise, will continue pursuant to the proposed amended rules.

Environmental Impact

The Department anticipates that the overall proposed amended rules will continue to have a positive environmental impact. The Noise Control rules establish sound level standards that serve

to protect public health and preserve a high quality of life for New Jersey residents and wildlife that would otherwise be impacted by excessive noise.

Federal Standards Statement

N.J.S.A. 52:14B-23 requires State agencies that adopt, readopt, or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a Federal standards analysis.

The proposed rules do not impose any standards or requirements that exceed the standards or requirements imposed by any applicable Federal law. There are Federal sound level standards for certain sources of noise, such as train coupling and idling, which can be enforced by local municipalities by referencing the Federal standards, which are incorporated into the Noise Control rules. With this exception, the Noise Control rules at N.J.A.C. 7:29 have not been promulgated pursuant to Federal law or in order to implement, comply with, or participate in any program established pursuant to Federal law. Accordingly, a Federal standards analysis is not required.

Jobs Impact

The Department anticipates that the proposed rulemaking will have no impact on job creation or retention in the State. The proposed rulemaking relates to regulation of noise and will not affect employment in the State.

Agriculture Industry Impact

The proposed rulemaking should have a relatively small impact on the State's agriculture industry. Agricultural activities are excepted from the rules in accordance with N.J.A.C. 7:29-1.5 and are generally under the purview of the Right to Farm Act. There may be some impact to agricultural activities from the proposed requirement at N.J.A.C. 7:29-1.5(a)1 that, in order to qualify for an exception to the sound limits, farm equipment and vehicles must be properly maintained with a muffler and/or sound reduction device, in good working order, to ensure that the equipment and vehicles are operated in a manner that does not result in unnecessary noise. This proposed requirement is intended to protect the people of New Jersey from unnecessary noise from poorly maintained equipment.

Regulatory Flexibility Analysis

As required through the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., the Department has evaluated the reporting, recordkeeping, and other compliance requirements that the proposed rulemaking would impose upon small businesses. The Regulatory Flexibility Act defines the term "small business" as "any business which is a resident in this State, independently owned and operated and not dominant in its field, and which employs fewer than 100 full-time employees." See N.J.S.A. 52:14B-17.

The recordkeeping, reporting, and compliance requirements of the rulemaking are as discussed in the Summary above. The Department does not anticipate any costs as a result of the rulemaking. Small, as well as large, businesses have the potential to create noise in violation of this chapter. Therefore, it is not appropriate to except small businesses from this chapter solely by virtue of their size, as the rules are designed to protect human health, welfare, and the environment.

However, when working with a facility to achieve compliance, the authorized enforcement agency has the discretion to offer grace periods and to establish differing time tables for compliance that take into account the resources available to small businesses. Thus, it is possible to minimize any adverse economic impact on small businesses in this fashion.

Housing Affordability Impact Analysis

In accordance with N.J.S.A. 52:14B-4.1b, the Department has evaluated the proposed rulemaking to determine its impact, if any, on the affordability of housing and the average costs of housing in the State. The Department believes there is an extreme unlikelihood that the rulemaking will evoke a change in the average costs associated with housing in the State. The rulemaking regulates excessive noise from commercial, industrial, public service, and community service facilities, and will continue to be enforceable pursuant to the proposed rulemaking.

Smart Growth Development Impact Analysis

In accordance with N.J.S.A. 52:14B-4.1b, the Department has evaluated the rulemaking to determine the impact, if any, on housing production in Planning Areas 1 or 2, or within designated centers, pursuant to the State Development and Redevelopment Plan. The rules regulate excessive noise from commercial, industrial, public service, and community service facilities. Therefore, it is extremely unlikely that the proposed rulemaking will evoke a change in housing production in Planning Areas 1 or 2, or within designated centers, pursuant to the State Development and Redevelopment Plan.

Racial and Ethnic Community Criminal Justice and Public Safety Impact

In accordance with N.J.S.A. 52:14B-4(a)(2) and 2C:48B-2, the Department has evaluated this rulemaking and determined that it will not have an impact on pretrial detention, sentencing, probation, or parole policies concerning adults and juveniles in the State. Accordingly, no further analysis is required.

Full text of the rules proposed for repeal may be found in the New Jersey Administrative Code at N.J.A.C. 7:29-2.1 and 2.12.

Full text of the proposed amendments follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

SUBCHAPTER 1. GENERAL PROVISIONS

7:29-1.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings unless the context clearly indicates otherwise.

. . .

"Agricultural activities" means those activities [performed on farmlands in order] required to cultivate the soil, produce crops, or raise livestock[. In addition], and activities associated with the growing, producing, processing, or selling of farm-related products, as long as those activities are conducted on [farmlands, would be considered agricultural activities] a commercial farm, as defined in the Right to Farm Act, N.J.S.A. 4:1C-1 et seq. The operation of a sound production device is not considered agricultural activity.

"ANSI" means the American National Standards Institute. ANSI standards referenced in this chapter are available at www.ANSI.org, and are incorporated herein by reference, as amended or supplemented.

"Authorized enforcement agency" means the Department, a local, county, or regional health agency certified pursuant to the County Environmental Health Act (N.J.S.A. 26:3A2-21 et seq.), to perform noise enforcement activities, a municipality with a [Department approved]

Department-approved noise control ordinance, or an employee of a county or municipal government who has received noise enforcement training and who is currently certified in noise enforcement pursuant to N.J.A.C. 7:29-[2.11]2.9; provided such agency, municipality, or employee is acting within its designated jurisdiction.

"[A-weighted sound level] **A-scale**" means the [sound level in decibels, reported as measured by a sound level measuring instrument having an "A"-weighting network which] **A-weighting**network of a sound level meter utilized to measure sound levels. The level so read is

reported in decibels and designated dBA. The A-scale discriminates against the lower frequencies according to a relationship approximating the auditory sensitivity of the human ear.

[The level so read is designated dBA.]

"Commercial facility" means any premises, property, or facility involving traffic in goods or furnishing of services for sale or profit including, but not limited to:

- 1.–8. (No change.)
- 9. Establishments providing living accommodations [which] **that** exceed six dwelling units, including, but not limited to, apartments, **condominiums**, co-ops, hotels, motels, and dormitories, when they are the source of the sound that is being investigated and the source of

sound is a [heating, air conditioning, pool filter unit or system, or outdoor amplified sound system.] mechanical device, electronic device, or sound production device owned or operated by the commercial facility.

"Community service facility" means, except as provided at paragraph 4 of the definition of "residential property," any [non-residential] facility used to provide services to the public, including, but not limited to:

- 1.–3. (No change.)
- 4. Public, private, and parochial schools (including colleges and universities);
- [5. Hospitals;]
- 5. Health care facilities, as defined in the Health Care Facilities Planning Act, N.J.S.A. 26:2H-1 et seq.;

6.–7. (No change.)

"Continuous airborne sound" means sound that is measured by the slow response setting of a sound level meter in accordance with the provisions [of] at N.J.A.C. 7:29-2, and [which] that lasts one second or longer. Impulsive sounds that are rapidly repetitive [and have] over a duration of one second or longer shall be measured as continuous airborne sound.

"dBA" means the abbreviation designating the unit of sound level as measured by a sound level meter using the [A-weighting] dBA setting.

"dBZ" means the abbreviation designating the unit of sound level as measured by a sound level meter using the dBZ setting.

. . .

["Electricity generation" means generation, transmission, or distribution of electricity for sale in the State.]

"Department" means the Department of Environmental Protection.

"Duty cycle" means the duration of one operating cycle for equipment that cycles periodically, whether or not the cycle is at regular intervals. For example, equipment that is on for five minutes, and off for 10 minutes, repeatedly, has a duty cycle of 15 minutes. A duty cycle also includes varying conditions of load or operation, such as an HVAC unit that operates at a higher or lower intensity in response to demand.

"Electronic device" means a device that accomplishes its purpose electronically.

"Emergency" means an unexpected occurrence or situation resulting from natural or unnatural causes [which] **that** endangers or has the potential to endanger **a public or private facility or** the health, safety, or resources of citizens [or a municipality,] and as such, necessitates prompt action and response [on the part of emergency services personnel, or contractors working] at the site of the emergency [to address an emergency].

"Emergency energy release device" means a device (such as a pressure release valve) used specifically to release excess energy on a non-scheduled basis as necessary for purposes of safety.

. . .

"Extraneous sound" means an intermittent sound that is neither neighborhood residual sound nor sound from the source under investigation. Examples of an extraneous sound include the following intermittent sounds: car horns, passing sirens, unmuffled vehicles, aircraft, and transient birds.

...

"IEC" means the International Electrotechnical Commission. IEC standards referenced in this chapter are available at www.IEC.ch, and are incorporated herein by reference, as amended or supplemented.

. . .

"Maximum sound level" means the maximum sound level measured by a sound level meter [on the "fast" or "impulse" setting].

"Mechanical device" means a mechanism consisting of a device that works on mechanical principles. For the purposes of this chapter, this shall also include devices that work on fluid dynamics principles to control the flow of gasses and liquids.

"Neighborhood residual sound level" means the measured value that represents the sound at the property of an affected person measured in accordance with N.J.A.C. 7:29-2.7(f)2 from all sound sources, exclusive of extraneous sound and the sound from the source property under investigation. Neighborhood residual sounds are differentiated from extraneous sounds by the fact that neighborhood residual sounds are being emitted the majority of the time, although they may not be continuous. Examples of neighborhood residual sounds include consistent, but not necessarily continuous, off-site traffic of properly muffled vehicles, surf, mechanical equipment not located on the property under investigation, seasonal insects, and a flock of non-transient birds.

"Noise" means any sound that is not in conformance with the provisions of this chapter.

"Octave band" means a grouping of sound frequencies identified by a nominal midband frequency as defined in ANSI S1.6. The octave bands referenced in this chapter are 31.5, 63, 125, 250, 500, 1000, 2000, 4000, and 8000 hertz.

. . .

"Person" means any individual, public, or private corporation, political subdivision, governmental agency, department or bureau of the State, [municipality,] industry, or association, including **a** condominium or co-op association[s], limited liability corporation[s], [and] partnership[s], [and] **or** limited liability partnership[s].

"Residential property" means property used for human habitation, unless the habitation is a condition of employment[, including,]. "Residential property" includes, but is not limited to:

- 1.–2. (No change.)
- 3. Recreational and entertainment property used for human habitation (for example, a campground); and
- 4. For purposes of measuring sound at a receptor, the portion of a [Community] community service [property] facility used for human habitation including:
 - i. Housing associated with a boarding school, college, or university;
 - ii. Staff or patient housing portion of a healthcare facility, as defined in the Health Care Facilities Planning Act, N.J.S.A. 26:2H-1 et seq.; and
 - iii. A shelter facility that is licensed or otherwise government-approved.

 "Responsible entity" means the person causing or controlling a source of sound.

"Sound level" means the sound pressure level measured in decibels with a sound level meter set for A-[weighting]scale; sound level is expressed in dBA.

"Sound level meter" means equipment that is used to measure sound pressure level, sound level, octave band sound pressure level, or maximum sound level, separately or in combination.

"Sound pressure level" means the [level] ratio of a [sound] measured [in dB units with a sound level meter which has a uniform ("flat") response over the band of frequencies measured.]

pressure in air to a reference pressure as measured with a sound level meter, in units of dB or dBZ.

"Sound production device" means any device for which the primary function is the production of sound including, but not limited to, a musical instrument, loudspeaker, radio, television, digital or analog music player, public address system, or sound-amplifying equipment.

"Sound source" means any person, animal, device, equipment, operation, process, activity, or phenomenon that emits or causes sound.

"Stationary emergency signaling device" means any device, excluding those attached to motor vehicles, used to alert [local persons engaged in local emergency operations. These include, but are not limited to, fire-fighters, first aid squad members, and law enforcement officers, whether paid or volunteer.] **emergency service personnel or the public.**

"Total sound level" means the measured level that represents the summation of the sounds from the source under investigation and the neighborhood residual sound level, excluding any extraneous sound, when measured on the property of an affected person.

"Wind screen" means a device recommended by the manufacturer as a microphone cover to reduce the effect of wind.

"Z-scale" means the Z-weighting network of a sound level meter utilized to measure sound pressure levels. The level so read is reported in decibels and designated dB or dBZ. Z-weighting (or zero weighting) is a flat (unweighted) response between 10 Hz to 20kHz.

7:29-1.2 [Industrial, commercial, or community service facilities] **Permissible sound level limits**

- (a) This subchapter applies to sound from industrial facilities, commercial facilities, and community service facilities.
- (b) This subchapter applies to sound received at commercial facilities, community service facilities, and residential property.
- [(a)] (c) No person shall cause, suffer, allow, or permit sound from any industrial, commercial, or community service facility that, when measured at **or within** any residential property line of any affected person, is in excess of any of the following:
 - 1. From 7:00 A.M. to 10:00 P.M.:
 - i. Continuous airborne sound [which] that has a sound level in excess of 65 dBA; or
- ii. Continuous airborne sound [which] **that** has an octave band sound pressure level in decibels **(dB or dBZ)** [which] **that** exceeds the values listed below in one or more octave bands:

Octave Band Center	Octave Band Sound
Frequency	Pressure Level
(Hz)	(dB or dBZ)
31.5	96
63	82

Octave Band Center	Octave Band Sound
Frequency	Pressure Level
(Hz)	(dB or dBZ)
125	74
250	67
500	63
1000	60
2000	57
4000	55
8000	53
	Or[,]

- iii. Impulsive sound in air [which] that has a maximum sound level in excess of 80 dBA.
- 2. From 10:00 P.M. to 7:00 A.M.
- i. Continuous airborne sound [which] that has a sound level in excess of 50 dBA; or
- ii. Continuous airborne sound [which] **that** has an octave band sound pressure level in decibels **(dB or dBZ)** [which] **that** exceeds the value listed below in one or more octave bands:

Octave Band Center	Octave Band Sound
Frequency	Pressure Level
(Hz)	(dB or dBZ)
31.5	86
63	71

Octave Band Center	Octave Band Sound
Frequency	Pressure Level
(Hz)	(dB or dBZ)
125	61
250	53
500	48
1000	45
2000	42
4000	40
8000	38
	or

iii. Impulsive sound in air [which] **that** has a maximum sound level in excess of 80 dBA and such [impulse] **impulsive** sound shall not be repeated more than four times in any hour.

Impulsive sound [which] **that** repeats more than four times in any hour shall not exceed 50 dBA.

[(b)] **(d)** No person shall cause, suffer, allow, or permit sound from any industrial, commercial, or community service facility that, when measured at **or within** the property line of any other commercial, or community service facility of any affected person, is in excess of any of the following:

- 1. Continuous airborne sound [which] that has a sound level in excess of 65 dBA; or
- 2. Continuous airborne sound [which] **that** has an octave band sound pressure level in decibels [which] **(dB or dBZ) that** exceeds the values listed below in one or more octave bands:

Octave Band Center	Octave Band Sound
Frequency	Pressure Level
(Hz)	(dB or dBZ)
31.5	96
63	82
125	74
250	67
500	63
1000	60
2000	57
4000	55
8000	53
	or

3. Impulsive sound in air [which] that has a maximum sound level in excess of 80 dBA.

7:29-1.4 Stationary emergency signaling devices

(a) Testing of only the [electromechanical functioning of a] stationary emergency signaling device shall occur [at the same time each day that a test is performed] **no more than once per day on a regular schedule**, but not before 8:00 A.M. or after 8:00 P.M. [Any such testing shall only use the minimum cycle test time. Except] **The duration of testing shall not exceed 10**

seconds, except as required for repair or replacement or as provided for [in] at (b) below[, such test time shall not exceed ten seconds].

- (b) Testing of the complete emergency signaling system including [the electromechanical functioning of] the signaling device and the personnel response to the signal, shall not occur more than once in each calendar month. Such testing shall not occur before 8:00 A.M. or after 8:00 P.M. [The ten second time limit on the electromechanical functioning of the signaling device shall not apply to such system testing.] The duration of the testing shall be limited to the minimum time necessary to determine whether the system is operating properly.
- (c) Stationary emergency signaling devices shall be used only for testing in compliance with applicable provisions of these regulations [and] **or** for **an** emergency [purposes where personnel and equipment are mobilized. Since personnel and equipment are mobilized during a weather emergency, emergency signaling devices may be utilized to announce a school closing resulting from a weather emergency].
 - (d)–(e) (No change.)
- (f) Nothing in this section shall have the effect of restricting the use of a stationary emergency signaling device to alert the public of an emergency pursuant to the provisions of the [emergency management act] **Emergency Management Act**, P.L. 1942, c. 251 (N.J.S.A. App. A:9-33 et seq.), or any applicable Federal laws or regulations pertaining to emergency planning and preparedness. [The requirements of this section do not apply to the use of stationary emergency signaling devices to warn the public or emergency personnel of a national or State emergency pursuant to the provisions of the emergency management act.] This section only pertains to the use of stationary emergency signaling devices to alert local emergency services

personnel and/or local citizens of a local emergency [such as a fire]. This section [also] does not apply when stationary emergency signaling devices are used or tested as part of the operations of the National Warning System, pursuant to the Federal Emergency Management Agency's Civil Preparedness Guide 1-16, or pursuant to the Federal Emergency Management Agency's Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants, FEMA Rep. 10.

- (g) A dual-purpose stationary emergency signaling device [which] **that** is used to alert the public of a national or State emergency and [which] **that** is also used to alert local emergency services personnel of local emergencies shall not be required to comply with N.J.A.C. 7:29-1.3(d), (e), and (f). If a [dual purpose] **dual-purpose** stationary emergency signaling device is used for local purposes, the device shall comply with all other provisions of this section.
- (h) When operated or tested in accordance with the requirements of this section, stationary emergency signaling devices are not required to comply with the operational performance standards [established] at N.J.A.C. 7:29-1.2.

7:29-1.5 [Exceptions] **Exemptions**

- (a) The operational performance standards [established] **set forth** at N.J.A.C. 7:29-1.2 shall not apply to any of the following [noise] **sound** sources:
- 1. Agricultural activities; provided that farm equipment and vehicles are operated with mufflers and/or sound reduction devices, in good working order, as originally equipped by the manufacturer, or otherwise fitted with a muffler and/or sound reduction device that is acoustically equivalent to the original manufacturer equipment;

2.–6. (No change.)

- 7. [Noise of] **Sound from** aircraft [flight] operations;
- 8. Public celebration[s that are government-sponsored or government-permitted events;]. An event, such as a festival or a parade, that commemorates a special occasion and is authorized by a government body. The event must be not for profit and open to the public and if a fee is charged, the fee may be used only to offset the expenses directly associated with the event;
 - 9. (No change.)
- 10. Surface carriers engaged in commerce by railroad when [the noise sources in question are] trains **are** in motion, operating retarders, train horns and whistles, or performing locomotive load test cell stands;
 - 11. (No change.)
- 12. Use of explosive devices: [These are] **As** regulated by the New Jersey Department of Labor and Workforce Development [under] **pursuant to** the [1960] Explosives Act [(], N.J.S.A. 21:1A-[1 to 21:1A-21)**128 et seq.**;
- 13. [Normal operation] **Operation** of a handgun, rifle, shotgun, skeetshooting, or trapshooting range [which] **that** has been maintained continuously in the same location since January 24, 1972; [or]
- 14. Emergency electricity generators at an industrial, commercial, or community service facility in use during an electrical outage[.];
 - 15. Wildlife not under the control of a person; or

16. An unamplified musical band during scheduled extramural competitive events, or within two hours prior to such event, at an academic institution or a venue utilized by an academic institution.

7:29-1.7 Enforcement

- (a) (No change.)
- (b) If any [person] **responsible entity** violates any provision of the Noise Control Act, N.J.S.A. 13:1G-1 et seq., [these rules] **this chapter**, or an order issued pursuant thereto, the authorized enforcement agency may institute an action in a court of competent jurisdiction for injunctive relief to prohibit and prevent such violation or violations and the said court may proceed in the action in a summary manner.
- (c) Any [person] **responsible entity** who violates any provision of the Noise Control Act, N.J.S.A. 13:1G-1 et seq., [these rules] **this chapter**, or an order issued pursuant thereto shall be subject, upon order of a court, to a civil penalty of not more than \$3,000 for each offense and each day during which the violation continues shall constitute an additional, separate, and distinct offense.
 - (d)-(e) (No change.)
- (f) A violation shall be considered a minor violation if **both the following conditions are**met:
- 1. The violation is not the result of the purposeful, reckless, or criminally negligent conduct of the violator; [and]
 - 2. (No change.)

(g) (No change.)

7:29-1.8 County and municipal ordinances to regulate noise

(a) A governing body of a municipality or county or board of health may adopt a noise control ordinance in accordance with the Noise Control Act of 1971, [at] N.J.S.A. 13:1G-21[,]; provided that the ordinance shall be more stringent than the Noise Control Act or the regulations promulgated pursuant thereto, must be otherwise consistent with the Statewide scheme of noise control, and meet[s with] the written approval of the Department.

(b) (No change.)

SUBCHAPTER 2. PROCEDURES FOR THE DETERMINATION OF NOISE FROM STATIONARY SOURCES

7:29-[2.2]**2.1** Acceptable test methods

Testing shall be conducted in accordance with methods set forth hereinafter. Alternative methods, procedures, or [instruments] **equipment** may be used subject to approval and conditions prescribed by the Department. The Department may itself employ such alternatives when warranted by test conditions or other circumstances.

7:29-[2.3]**2.2** Measurement principle

For purposes of measuring [noise] **sound** in accordance with applicable provisions of the rules of the Department, sound levels shall be determined by a qualified investigator using [instruments] **equipment** and procedures prescribed by the Department.

7:29-[2.4]2.3 Operating conditions during the [test] investigation

Insofar as practicable, sound will be measured while the source under investigation is operating at [normal, routine conditions and, as necessary, at other conditions including, but not limited to, design, maximum and fluctuating rates. For test purposes, these conditions will apply during the times from 7:00 A.M. to 10:00 P.M. and from 10:00 P.M. to 7:00 A.M.] a condition that is representative of the complaint.

7:29-[2.5]**2.4** General requirements

- (a) All tests shall be conducted in accordance with the following procedures:
- 1. The investigator shall, as set forth at N.J.A.C. 7:29-2.7(a), confirm the facility under investigation and, to the extent practicable, identify all sources contributing to neighborhood residual sound and extraneous sound to the point of measurement.
- 2. Measurements of total sound shall be taken at or within the property line of any affected person. Total sound shall be measured as set forth at N.J.A.C. 7:29-2.7(f)1.
- [3. The measuring device must be calibrated before and after each series of readings and at least once every hour.]
 - 3. Neighborhood residual sound shall be measured as set forth at N.J.A.C. 7:29-2.7(f)2.
- 4. The investigator shall perform a field calibration check on the sound level meter at the beginning and the end of the measurement session.
- [4.] **5.** The sound level meter [must be recalibrated] and the calibrator must be [recalibrated] **laboratory certified** at least once per year by the manufacturer or by a laboratory accredited for

[such] calibrations by [either] the American Association for Laboratory Accreditation, ANSI

National Accreditation Board, or the National Institute of Standards and Technology. [A copy of written documentation of such recalibration, in a form approved by the Department, shall be kept with the equipment to which it refers.]

[5.] **6.** No outdoor measurements shall be made:

i.-iii. (No change.)

[iv. When the ambient temperature is below 14 degrees F (-10 degrees C) or above 122 degrees F (50 degrees C).]

iv. When the ambient temperature range during the test is beyond the range of Class 1 (Type 1) or Class 2 (Type 2) accuracy of the sound level meter and calibrator.

7:29-[2.6]**2.5** Equipment

- (a) Requirements for equipment are as follows:
 - 1. Sound level meters:
- i. Measurements of continuous or [impulse] **impulsive** sound shall be made either with a **Class 1** Type 1 [(Precision)] or a **Class 2** Type 2 [(General Purpose)] sound level meter manufactured to the requirements [of ANSI S1.4-1971 specification for sound level meters. (see N.J.A.C. 7:29-2.12(a)2) or its successor] **at ANSI S1.4 or IEC 61672**.
- ii. Measurements of sound by octave bands shall be made with a sound level meter with an octave band frequency filter set that conforms to the requirements of Class 1 or Class [II] 2, as specified [in ANSI S1.11-1966 (R-1976) "specification for octave, half-octave, and third-octave band filter sets" (see N.J.A.C. 7:29-2.12(a)1) or its successor] at ANSI S1.11 or IEC 61260.

- [2. Calibrators used should be those recommended by the manufacturer of the sound level meter.]
- 2. Shall conform to the requirements of Class 1 or Class 2 as specified at ANSI S1.40 or IEC 60942.
 - 3. Other equipment:
 - i. (No change.)
- ii. [A wind] **Wind** speed measuring [instrument] **equipment** including a range of five to 15 miles per hour (2.2 to 6.7 meters per second) with plus or minus two miles per hour (plus or minus 0.9 meters per second) accuracy.
- [iii. Optional equipment including a flashlight or miner's lamp, a microphone extension cable, an extension pole with microphone holder, a headphone equipped with a plug to fit the sound level meter, a tape measure or an optical distance indicator for determining distance, a compass for determining direction or, alternatively, a suitable map of the vicinity, and a thermometer for determining ambient temperature.]

7:29-[2.7]**2.6** Reporting requirements

- (a) (No change.)
- (b) The report for each test shall include:
 - 1.-2. (No change.)
- 3. The times [of calibration of the measuring devices] that the investigator conducted field calibration checks of the sound level meter while on site;
 - 4. (No change.)

- 5. The temperature [when the ambient is below 14 degrees F (-10 degrees C)];
- 6.–7. (No change.)
- 8. The date each piece of equipment was last recertified [or recalibrated by the manufacturer or other approved person] as set forth at N.J.A.C. 7:29-2.4(a)4;
 - 9. The duty cycle of source of interest, if applicable;
- 10. The total sound level in dBA, or [dB if in octave bands, or in dBA peak if measuring maximum instantaneous sound pressure level of impulse sound] in dB or dBZ if measuring octave bands, at the measurement [point] location;
- 11. The neighborhood residual sound level in dBA, or dB **or dBZ** if in octave bands, at the measurement [point] **location**;
- 12. A sketch of the site, not necessarily to scale, orienting the [facility of interest, the points of measurement, topographic features, and relevant distances, containing] **sound source(s) under investigation, the neighborhood residual source(s), and the location of the affected person(s), including relevant property boundaries, measurement locations, topographic features, and adjacent structures. The sketch shall provide sufficient information for another investigator to repeat the measurements under similar conditions;**
 - 13. A description of the sound sources under investigation by character and location; and
- 14. A description of the neighborhood residual sounds and extraneous sounds by character and location, to the extent feasible.

7:29-[2.8]**2.7** [Preparation for testing] **Sound testing procedure**

- (a) Survey: [Prior to taking noise measurements] **During an investigation**, the investigator shall explore the vicinity of the suspected source on foot to identify [any other] sound sources [which] **that** could affect measurements, [to] establish [the] **their** approximate location and character, [of the main sound source] and to select suitable [points] **locations** from which to measure the sound from the [suspected source] **facility under investigation** and the neighborhood residual sound. **The investigator shall also confirm the facility under investigation** is the responsible entity.
- (b) Nature of sound: [While the sound source or sources are under observation the investigator shall ascertain whether the sound is steady state or extraneous] **The investigator shall determine whether the sound under investigation is continuous or impulsive.** The duty cycle [time, if any], **if applicable**, shall be measured and noted.
 - (c) (No change.)
- (d) [Instrument] **Equipment** selection: After determining the character of the sound to be measured, the investigator shall select the appropriate measuring equipment pursuant to the requirements [of] **at** N.J.A.C. 7:29-[2.6]**2.5**. [If the sound is concentrated within a narrow band of frequencies, an instrument capable of octave band analysis shall be selected. If impulse sound is predominant, an instrument capable of impulse peak measurement shall be selected.]

[7:29-2.9 Procedure

(a) Calibration of sound Measuring Equipment: When a meter zero adjust screw is accessible from outside the sound measuring equipment, then prior to making sound level measurements, the investigator shall zero adjust in accordance with the manufacturer's instructions. If the zero

adjust screw of the equipment is not readily accessible, and if the investigator observes that the meter zero adjust is defective, the equipment shall be taken out of service until repaired. Before and after making a set of sound level measurements, the investigator shall check, and if warranted, adjust the sound level meter calibration at the level specified by the sound level calibrator used. When a multi-frequency calibrator is used, it shall be set at 1000 Hertz. The procedures below shall be followed before and after each set of measurements:

- 1. Turn on the sound level meter and allow it to warm-up as specified by the manufacturerusually three to five minutes;
 - 2. Check the condition of the sound level meter battery and replace if necessary;
- 3. Set the sound level meter range or attenuator setting to the appropriate level (most calibrators produce sound levels in the range of 94 to 124 dB);
- 4. Set the sound level meter for slow response and set the sound level meter weighting switch to the appropriate position in accordance with the manufacturer's instructions for the sound level calibrator to be used;
 - 5. Test the calibrator batteries and replace them if necessary;
 - 6. Allow the calibrator to warm-up if necessary as specified by the manufacturer;
- 7. Place the calibrator on the microphone gently to prevent damage to the microphone diaphragm; and
- 8. Adjust the sound level meter using the calibration (sensitivity or amplifier gain) adjustment until the meter reads the calibrator output.]

- (e) Calibration of sound level meter: The investigator shall conduct a field calibration check of the sound level meter and perform any necessary adjustments as prescribed by the manufacturer of the sound level meter.
- [(b)] (f) Measurement: After [calibrating the sound level meter, switch to] conducting the field calibration check, the investigator shall select the appropriate weighting [position,] setting and response time, and place the wind screen over the microphone. [The appropriate weighting position is "A" for measurement of continuous or impulse sound, and "flat" or "ext. Filter," for octave band measurements. The meter is now ready for measuring the sound level.]
 - 1. Total sound level is measured as follows:
 - i.—ii. (No change.)
- iii. When measuring continuous sound, the measuring device shall be set for ["A" weighting] **A scale**, "slow" [meter] response[, and the range switch shall be set to that range in which the meter display reads nearest to the maximum end of the scale] **time**. When the measured sound is variable, causing the meter display to fluctuate, record both the minimum and maximum readings, for example, 66-69 dBA, indicating that the reading was not less than 66, nor more than 69, during the measurement. [When selecting the proper range setting for making the measurement, do not include extraneous sounds.]
- iv. When octave band measurements are made, the sound from the source must be constant in level and in character. [Record the maximum and minimum readings in dB.] Use ["flat" response or "ext. Filter"] flat-scale, linear-scale, or Z-scale settings, as appropriate to the [instrument. (Do not use "A" scale)] equipment. Record the maximum and minimum readings as measured. If level variations exceed plus or minus 2 dB in the bands containing the principal

source frequencies, discontinue the measurement. [The octave band level shall be used as a supplement to "A" weighted level measurements.]

v. To measure [impulse noise] impulsive sound, the investigator shall set the meter for ["A" weighting] A-scale. The investigator may use either the fast or impulse [setting] response time and may employ the "hold" setting if the meter is so equipped. If the investigator is not employing the "hold" setting, he or she should report the maximum sound level displayed on the meter for a representative number of impulses. If the "hold" setting is employed after measuring an impulse, press the reset button to prepare for measurement of the next impulse. If [the] there are numerous impulses [follow each other rapidly as for example in a fusillade], it is not necessary to measure every impulse. [In such a case, measure as many impulses as feasible, estimate the number of impulses occurring, and the time period during which they occur.]

Impulsive sounds that are rapidly repetitive over a duration of one second or longer shall be measured as continuous airborne sound.

vi. While making sound level measurements, observe whether the meter reading is increased by extraneous sound sources such as passing vehicles, aircraft flying overhead, barking dogs, etc. In such cases, postpone the sound level measurement until the extraneous sound has abated. [This shall not apply, however, if the source of the extraneous sound is located on the facility under investigation.]

vii. There are instances in which the sound propagation from a source is such that the sound level varies significantly with [altitude] **elevation**. In such cases, [connect the sound level meter to its microphone by a long cable and, after calibrating, elevate the microphone with a long pole or other means to measure the sound level at different altitudes.] **the investigator may also**

conduct measurements at the window or other appropriate elevation of the affected person.

A field calibration check of the assembled sound measurement equipment shall be performed in accordance with (f)1ix below.

viii. (No change.)

ix. [No less frequently than at one hour intervals during the investigation,] **Prior to**beginning sound measurements, and again at the conclusion of measurements, [calibrate]

perform a field calibration check of the sound level meter, check the condition of the batteries, measure the wind speed, and record the results for inclusion in the Noise Measurement Report. If the sound level meter has drifted more than 0.5 dB off calibration, or if the sound level meter battery check procedure indicates that the battery charge is too low, or if the wind speed has increased to greater than 12 miles per hour (5.4 meters per second), then measurements taken since the previous calibration check shall be considered invalid. A meter with an electronic display showing a "low battery" indication may continue to be operated for the duration specified in the manufacturer's manual without invalidating the previous readings, if a subsequent calibration check is satisfactory. [Wind gusts over 12 miles per hour (5.4 meters per second) that begin after at least one hour of measurements shall not invalidate measurements already collected.] Periodic wind gusts greater than 12 mph shall not invalidate measurements taken during periods when sustained wind speeds remain at or below 12 mph.

2.-3. (No change.)

7:29-[2.10]**2.8** Calculations

(a) Corrected source sound level: Correct the total sound level for the neighborhood residual sound in accordance with the procedure for using Table 1 to determine the sound level from the sound source of interest. If the difference between the total sound level and the neighborhood residual sound level is greater than 10 dB, no correction is necessary.

TABLE 1

THE DETERMINATION OF SOURCE SOUND LEVEL FROM TOTAL AND NEIGHBORHOOD

RESIDUAL SOUND MEASUREMENTS

A Sound Level Difference	B Correction Factor
(Decibels)	(Decibels)
0.5	9.6
1	[7] 6.9
2	[4] 4.3
3	3
4	[1.8] 2.2
5	[1.6] 1.7
6	[1.2] 1.3
7	[1]1.0
8	[0.75] 0.7
9	0.6

TABLE 1

THE DETERMINATION OF SOURCE SOUND LEVEL FROM TOTAL AND NEIGHBORHOOD

RESIDUAL SOUND MEASUREMENTS

A Sound Level Difference	B Correction Factor
(Decibels)	(Decibels)
10	0.5
Greater than 10	0.0

Procedure for Using Table 1 (No change.)

7:29-[2.11]2.9 Qualifications of enforcement personnel

For the purposes of this chapter, an employee representing an authorized enforcement agency shall be considered qualified to [make noise] **conduct sound** measurements and enforce [the State's Noise] rules] **this chapter** or a municipal noise ordinance approved by the Department,[as the case may be] if such person completes a noise certification course, and is recertified, at least once every two years at a **Department-approved** noise certification course [which] **that** is offered by [the Department of Environmental Sciences of Cook College,] Rutgers, the State University **of New Jersey, or another Department-approved institution, found at the**

Department's noise control website (currently at www.nj.gov/dep/enforcement/ncp.html).

The Department [of Environmental Protection] shall provide an extension for recertification on a case-by-case basis beyond the [two year] two-year period for a person until the next time the recertification course is offered. Such requests shall be made, in writing, by submitting a Department-approved form, available from the Department's noise control website, to the Department at least 10 working days prior to the expiration of the person's certification. The Department will consider, on a case-by-case basis, a request for an extension for recertification that is submitted fewer than 10 working days prior to the expiration of the person's certification, if the person presents documentation of an emergency or extenuating circumstance that prevented timely submission of the request. If a scheduled recertification course is canceled, the person's certification shall automatically be extended, without making a request to the Department, until the next time the recertification course is offered.