

**Gas Compressor Industry
Noise Regulation and
Control Review Handbook**

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**GAS COMPRESSOR INDUSTRY
NOISE REGULATION AND CONTROL REVIEW
HANDBOOK**

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Prepared for:

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1. INTRODUCTION

In July 1991, Ecology and Environment, Inc. (E & E), was contracted by The Interstate Natural Gas Association of America Foundation, Inc. (INGAA), to review noise legislation and investigate noise-control techniques that apply to the natural gas transmission industry. Data collected were to be summarized and made available to INGAA member firms for use as a handbook to assist them with noise-related decision-making matters.

E & E began the project by contacting agencies responsible for noise-control policy in the lower 48 states and the District of Columbia, as well as representatives from the U.S. Environmental Protection Agency (USEPA), Federal Energy Regulatory Commission (FERC), and the U.S. Department of Housing and Urban Development (HUD). A summary of applicable regulations is provided in Section 2 of this handbook.

The next task was the collection of information concerning noise-source specification and control technology. This information is presented in Section 3.

To obtain a more realistic idea of problems experienced by the gas industry in attaining specific noise levels, as well as to determine what types and techniques of noise control are in use by the industry, E & E prepared a questionnaire, which was distributed by INGAA to its members. The form queried members on these stated concerns; a summary of the responses obtained is presented in Section 4.

Terminology used in discussions of noise regulation and control is defined in Appendix A. A bibliography containing noise-control reference material is presented in Appendix B. State noise regulations are provided in Appendix C.

2. NOISE REGULATION REVIEW

Agencies of the continental 48 states and the District of Columbia that have jurisdiction over noise-related matters were surveyed regarding acceptable noise levels. In addition, USEPA, FERC, and HUD were contacted for information on applicable noise regulations. This section contains a summary of the information obtained from these sources.

2.1 STATE REGULATIONS

All lower 48 states and the District of Columbia were contacted regarding enforceable noise legislation. Enforceable for purposes of this project refers to measurable noise as opposed to nuisance noise, which is not measured. Only nine of the governmental agencies surveyed had enforceable noise regulations in place. The nine were Connecticut, Delaware, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, Oregon, and the District of Columbia.

Most of the regulations were based on land use or zoning designations. All had broad-band sound-level limits. A broad-band sound level is the total of all sound present at a particular time over the entire spectrum (all frequencies) of human hearing.

Three of the states, Illinois, Massachusetts, and Oregon, had pure tone components in their noise-control regulations. Pure tone noise is determined by measuring the ambient sound level and dividing it into its component frequencies, typically octave-band frequencies. The resulting frequency spectrum is reviewed to determine whether one center band

frequency sound level is significantly higher (more than 3 decibels [db]) than its two adjacent center frequencies.

Massachusetts was the only state that had regulations limiting the addition of noise to ambient levels. Delaware was the only state that had a vibration regulation.

Table 2-1 presents a summary of noise level regulations, and Table 2-2 lists state agencies responsible for noise-related issues along with applicable telephone numbers.

2.2 LOCAL REGULATIONS

All agencies contacted indicated that local noise ordinances are not typically tracked by state agencies. E & E, therefore, contacted Dr. Clifford Braydon of the Georgia Institute of Technology, who is considered to be an expert in community noise regulation. He indicated that in 1981 there were approximately 2,000 municipalities (with populations over 10,000) with enforceable noise regulations in place. Currently, more than 6,000 municipalities have enforceable noise legislation. Most regulations are based on zoning classifications, and approximately two-thirds of the regulations address pure tone noise.

Because of the large number and ever-changing nature of local noise ordinances, any prepared summary would probably be inaccurate before it could be published. It is therefore recommended that during any site location process, local noise ordinances also be investigated.

2.3 FEDERAL REGULATIONS

E & E also reviewed noise information from USEPA, HUD, and FERC. USEPA only issues noise guidelines; it does not enforce noise control. HUD has "acceptable" noise standards, which should not typically be affected by compressor station operation. FERC is the only agency that specifically regulates noise emitted from gas compressor stations. Noise regulation summaries as well as telephone numbers for these federal agencies are also presented along with the state information in Tables 2-1 and 2-2.

Table 2-1

NOISE ORDINANCE SUMMARY

State/ Federal Agency	Enforceable Standards	Regulations Based on Zoning	Noise Characteristics Considered				Noise-Averaging Calculations		
			Broad-Band	Tonal	Max. Peak	Vibration	L _{dn}	L _{eq}	L _z
Alabama Arizona Arkansas									
California Colorado Connecticut	X	X	X	X	X				X
Delaware District of Columbia Florida	X X	X X	X X		X	X		X X	
Georgia Idaho Illinois	X	X	X	X	X			X	
Indiana Iowa Kansas									
Kentucky Louisiana Maine									
Maryland Massachusetts Michigan	X X	X X	X X	X			X	X	X
Minnesota Mississippi Missouri	X	X	X						X
Montana Nebraska Nevada									
New Hampshire New Jersey New Mexico	X	X	X		X			X	
New York North Carolina North Dakota									
Ohio Oklahoma Oregon	X	X	X	X	X				X
Pennsylvania Rhode Island South Carolina									
South Dakota Tennessee Texas									
Utah Vermont Virginia									

Table 2-1, Cont.

State/ Federal Agency	Enforceable Standards	Regulations Based on Zoning	Noise Characteristics Considered				Noise-Averaging Calculations		
			Broad-Band	Tonal	Max. Peak	Vibration	L _{dn}	L _{eq}	L ₅
Washington West Virginia Wisconsin Wyoming									
FERC HUD USEPA	X	X	X				X		

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Table 2-2

NOISE INFORMATION CONTACTS

State	Department/Agency	Telephone Number
Alabama Arizona Arkansas	Environmental Management Environmental Quality Pollution Control	205/271-7700 602/257-2300 501/562-7444
California Colorado Connecticut	Environmental Protection Natural Resources Environmental Protection	916/445-3846 303/866-3311 203/566-5599
Delaware District of Columbia Florida	Natural Resources and Environmental Conservation Consumer and Regulatory Affairs Environmental Regulation	302/739-4506 202/727-7705 904/488-9334
Georgia Idaho Illinois	Environmental Protection Environmental Quality Environmental Protection	404/656-4713 208/334-5840 217/785-5735
Indiana Iowa Kansas	Environmental Management Environmental Protection Environment	317/232-8162 515/281-4308 913/296-0077
Kentucky Louisiana Maine	Environmental Protection Environmental Quality Environmental Protection	502/564-3350 504/765-0370 207/289-2691
Maryland Massachusetts Michigan	Environmental Protection Environmental Protection Environmental Protection	301/631-3000 617/292-5500 517/373-1220
Minnesota Mississippi Missouri	Pollution Control Environmental Protection Environmental Quality	612/296-6300 601/961-5171 314/751-3443
Montana Nebraska Nevada	Natural Resources and Conservation Environmental Control Environmental Protection	406/444-6873 402/471-2186 702/687-4670
New Hampshire New Jersey New Mexico	Environmental Services Environmental Protection Environment	603/271-3503 609/984-4161 505/827-2850
New York North Carolina North Dakota	Environmental Conservation Environmental Health and Natural Resources Health and Consolidated Laboratories	518/457-5400 919/733-4984 701/221-5188
Ohio Oklahoma Oregon	Environmental Protection Pollution Control Environmental Quality	614/644-3020 405/271-4468 503/229-5696
Pennsylvania Rhode Island South Carolina	Environmental Resources Environmental Management Environmental Health	717/783-1303 401/277-6800 803/734-5360
South Dakota Tennessee Texas	Environmental Regulation Conservation Air Control Board	605/773-3153 615/741-3931 512/451-5711
Utah Vermont Virginia	Environmental Health Environmental Conservation Health	801/538-6121 802/244-8731 804/786-2378

Table 2-2, Cont.

State	Department/Agency	Telephone Number
Washington	Ecology	206/753-6502
West Virginia	Commerce, Labor and Environmental Resources	304/348-2761
Wisconsin	Natural Resources	608/266-2621
Wyoming	Environmental Quality	307/777-7937
--	FERC (Federal Energy Regulatory Commission)	202/208-0600
--	USEPA (U.S. Environmental Protection Agency)	202/382-2080
--	HUD (Housing and Urban Development)	202/708-1422

-- Not applicable.

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3. NOISE SOURCE CONTROL

Noise source control is a major problem faced by the gas compressor industry. This section presents information regarding this topic. The section begins with a summary of noise principles, identifies potential noise sources at gas compressor facilities, provides an overview of equipment manufacturers and noise-control equipment vendors' responses to noise-control problems, identifies some research institutes and universities involved in noise-control research, and concludes with recommendations for research of promising noise-control techniques.

3.1 NOISE PRINCIPLES

To ascertain what type of noise-control may be most appropriate to address a particular community noise problem, it is necessary to have at least a rudimentary understanding of the principles of sound propagation and attenuation. The following is a brief summary of basic principles:

- o Physically, sonic and vibratory manifestations of sound energy are essentially the same.
- o Sound travels through different media at different speeds. The denser the material, the more rapidly sound will travel through it.
- o As frequency decreases, wavelength increases. Sound having a wavelength much larger than an obstacle is essentially unaffected by the presence of the obstacle. Therefore, a wall is an unacceptable control option when dealing with low-frequency noise but is a superior choice to control high-frequency noise.
- o Sound level is reduced with distance.

Every noise problem has a source from which sound energy radiates (source). The sound travels from the source via a number of potential routes (pathways) and ultimately reaches a person's ear (receiver). In order to control the level of perceived noise, the source, path, or receiver must be modified.

This section deals with community noise source control. A community noise source, for purposes of this report, is one which radiates perceivable sound continuously or cyclically, such as a compressor.

3.2 COMMUNITY NOISE SOURCES

There are many potential community noise sources present at gas compressor facilities. Among these are:

- o Heat exchangers,
- o Heater-treaters,
- o Regulators, and
- o Compressors.

The following subsections present descriptions of these noise sources and summaries of accepted noise-control procedures.

3.3 HEAT EXCHANGERS

Though not generally considered a major noise source, heat exchangers may at times be implicated as sources of community annoyance. Most noise is generated by the heat exchanger fan, which produces a broad band sound spectrum with a broad low frequency peak. The most effective noise-control treatment is to choose a fan with a good aerodynamic profile. Another effective treatment is minimization of blade loading per unit length, which can be accomplished by increasing the number and length of blades and/or reducing the fan speed.

The motor and/or fan drive transmission may also produce unwanted noise. This can usually be controlled by enclosing the unit(s) in an acoustically lined housing.

In addition to treating noise-producing portions of a heat exchanger, it must also be remembered that any piping attached to the unit or any mechanical connection to structural members will act as a conduit to allow noise to travel away from the unit and manifest itself

elsewhere in the facility. Lagging should be installed on piping and care should be taken to avoid mechanical connections between the pipe wall and structural members.

Mechanical connections between the heat exchanger and structural members, including the ground, should be minimized. Connections should be isolated from the structure itself following vibration isolation procedures using springs, rubber pads, etc.

3.4 HEATER-TREATERS

Heater-treaters are not major noise sources in themselves; however, because of their visibility and typically exposed locations, they are identified in the community as noise sources. Heater-treater noise is generated primarily by combustion and smoke suppression processes. Combustion produces generally low-frequency noise, while smoke suppression processes generate high-frequency noise.

One effective noise-control technique is to locate the heater-treater as far from community sight as possible, or to at least block the public's view of it. Without the visual cue, the relatively moderate noise produced may be imperceptible in the community. Additionally, noise is attenuated with distance, but higher frequencies are attenuated more rapidly by distance than lower frequencies.

If high frequency noise still poses a problem, changes to the smoke suppression system may be required. Low-frequency noise may be more difficult to control and may require further analysis.

3.5 REGULATORS

Regulators are used at several locations within the gas compressor facility boundaries. The pressure-reducing process causes high-frequency noise to be produced. The most cost-effective method of control is to enclose the regulator(s) in an acoustically lined housing. Any inspection panels/doors must be tight fitting to preclude the transmission of noise produced by the regulator.

3.6 NATURAL GAS COMPRESSORS

Compressors are the dominant noise source present at gas compressor facilities. There are two basic types of compressors, reciprocating and

centrifugal, which are generally driven by reciprocating or turbine engines. Several possible modifications/combinations are available, each with its own inherent potential noise problems.

3.6.1 Reciprocating Compressor

This positive displacement type of compressor is generally used for smaller volumes and when high compression pressure is required. The unit typically operates at slower speeds than centrifugal units. Many units are integral--the compressor and engine are on the same frame.

The sound spectrum attributable to reciprocating compressor operation is generally in the lower frequencies. The unit's massive casing, however, provides considerable sound transmission loss. Another potential source of noise associated with reciprocating compressors is bearing noise. Sound can also be radiated to the environment through mounting points and attached pipes.

One noise-control technique is enclosure of the unit in an acoustically lined housing. Because of the low-frequency sound produced, it is very important that any enclosure be airtight and that all inspection covers and doors be tight fitting to prevent noise transmission. Bear in mind that additional cooling may be required for the enclosed unit and any penetrations must also be airtight. All cooling air intakes and exhausts must be acoustically treated to avoid the escape of sound to the outside.

Excessive bearing noise may be controlled through proper preventive maintenance procedures. Bearing noise is indicative of worn bearings and when observed usually requires that internal mechanical repairs be made.

In addition to airborne noise, attention must also be directed to structure-borne noise. This can be controlled through the use of vibration isolation techniques. Vibration isolation must also be performed on any piping attached to the compressor. Lagging should be installed on piping and care should be taken to avoid mechanical connections between the pipe wall and structural members.

3.6.2 Centrifugal Compressor

This type of compressor is generally employed when large volumes of gas must be compressed and high pressure differentials are not required. It typically operates at relatively higher speeds than reciprocating compressors.

High-speed operation generally produces a high-frequency noise spectrum, only a small portion of which escapes through the unit's massive casing. Because of its high-speed operation, care must be taken to avoid an unbalanced situation, which would cause excessive noise and vibration. Sound is also radiated through unit-mounting points and attached piping.

Noise can be controlled by enclosing the compressor in an airtight, acoustically lined housing with tight-fitting doors and inspection covers. If additional cooling is required, all penetrations to the enclosure must be treated to prevent the escape of noise.

Another route of sound transmission is through the unit's supporting structure. Control of this noise is possible through use of appropriate vibration isolation techniques using rubber pads, springs, etc., at all mechanical connection points. Vibration isolation should also include attached piping. Lagging should be installed on piping and care should be taken to avoid mechanical connections between the pipe wall and structural members.

3.6.3 Reciprocating Engine

Reciprocating engines used in conjunction with reciprocating compressors are usually integral, i.e., both pieces of equipment are mounted on one frame and share a common crankshaft. A reciprocating engine can cause more vibration than turbines if it is improperly designed and/or installed. This type of engine generally operates at lower speeds than turbines.

The relatively low-speed operation of this engine produces a generally low-frequency noise spectrum. Other prominent noise sources include intakes, exhaust, and crankcase ventilators. Worn bearings may also produce discernible noise; however, when bearing noise is observed, internal mechanical repairs are typically necessary.

The engine is available in either naturally aspirated or turbocharged versions. Naturally aspirated engines use air at atmospheric pressure to provide the oxygen necessary for combustion. The inlet may be a source of high-frequency noise.

Turbocharged engines supply air under pressure to the engine, displacing exhaust gases in the cylinder headspace. This provides a relatively oxygen-rich air-fuel mixture, which increases engine horsepower. The aspiration type produces high-frequency intake noise; high-frequency noise is also associated with the turbocharger unit.

Engine exhaust is typified by low-frequency noise. Crankcase ventilators are also a low-frequency noise source, whose frequency distribution may change with engine wear.

Airborne noise generated by the engine can generally be controlled by locating the unit in an acoustically lined, airtight enclosure. All doors and inspection covers must be tight fitting. All penetrations to the enclosure must be acoustically treated to prevent the escape of noise. Turbine noise may be controlled by enclosing the unit in an acoustically lined housing, taking all precautions stated previously to prevent the escape of noise.

Noise emanating from intakes, exhausts, and vents is typically controlled by passive silencers (i.e., mufflers). This noise may further be controlled by elevating the inlet/outlet of the device in relation to the affected community.

Structure-borne noise is also a concern with the reciprocating engine. Mechanical connections to the structure should be minimized. Appropriate vibration isolation techniques should be employed at all connecting points including those to attached piping. Lagging should be installed on all attached piping, and mechanical connections between the pipe wall and structural members must be avoided.

3.6.4 Turbine Engine

Turbine engines are generally used to drive centrifugal compressors, and are not normally used with reciprocating compressors. Two types are utilized by the gas compressor industry; industrial turbines and aircraft-derivative turbines. The industrial turbine operates in the range of 6,000 to 8,000 rpm and may be used in a direct-drive

configuration with the compressor unit. The aircraft-derivative turbine operates in the range of 8,000 to 30,000 rpm and usually requires a speed-reducer between the turbine and compressor.

Turbines produce a high-frequency noise spectrum because of their high-speed operation. Other sources of noise are intakes, exhausts, and speed-reducers.

Intakes and exhausts generally produce a noise spectrum tending toward the higher frequencies. Speed-reducers may be a source of gear noise.

Turbine noise may be controlled by enclosing the unit in an acoustically lined, airtight housing. Inspection covers and doors must be tight fitting to avoid the escape of produced noise. Any penetrations to the enclosure must be acoustically treated to prevent the transmission of noise through the penetrations.

Airborne noise emitted by the intakes and exhausts is usually controlled by passive silencers, sometimes in conjunction with increasing the elevation of the inlet/outlet of the offending component. Noise produced by the speed-reducer may be controlled by enclosing it in an acoustically lined housing.

Noise is also transmitted to the structure through mechanical attachment of the unit to the structure. All attachment points should undergo vibration isolation treatment, through the use of springs, rubber pads, etc. Similar treatment should be employed for all piping attached to the turbine. Lagging should be installed on all attached pipes; mechanical connections between the pipe wall and structural members must be avoided.

3.6.5 Compressor Building

Sound produced by compressors and drive engines within a building can be magnified by building acoustics and by the physical placement of the equipment.

To prevent the establishment of a reverberant field in the building, walls and ceilings should be acoustically lined. This will reduce the perceived noise inside the structure as well as control the amount of noise leaving the building. As is the case with acoustic

equipment enclosures, doors, windows, and penetrations should be adequately sealed to prevent the escape of interior noise.

Buildings should be situated or acoustically treated to prevent them from acting like a "megaphone," i.e., directing radiated noise toward the adjacent community.

3.7 EQUIPMENT MANUFACTURERS

A number of manufacturers of turbine- and reciprocating engine-driven compressors were contacted regarding the availability of noise specifications for their equipment. Most manufacturers indicated that their equipment was usually built to order, and that accurate noise data, if required, were generally collected during unit testing. Each manufacturer also had several models available in different configurations and including different component parts. It was therefore difficult for manufacturers to provide accurate noise specifications for a particular model.

Because of these various factors, it is suggested that orders for gas compressor equipment stipulate that noise level as well as octave-band information be provided by the manufacturer.

3.8 NOISE-CONTROL EQUIPMENT VENDORS

Vendors of noise-control equipment were contacted for information on their products that are typically used by the gas compressor industry. A list of companies contacted is presented in Table 3-1.

Most vendors indicated that they work very closely with equipment manufacturers to provide noise attenuation products to meet required specifications. They also indicated that they work closely with designers and facility owners to provide custom-made noise-control products/systems to alleviate specific problems.

3.9 RESEARCH INSTITUTES AND UNIVERSITIES

Many research institutes and universities have programs relating to noise control. E & E contacted several of these organizations and inquired about the availability of noise-control documents and/or the status of current noise-control studies. A list of groups contacted appears in Table 3-2.

Publications dealing with noise control are available from the American Gas Association and the Electric Power Research Institute (refer to Table 3-3). Auburn University's Noise Control Center publishes the Noise Control Engineering Journal and the Center will research specific noise-related topics. The American Petroleum Institute, Gas Research Institute, and Pennsylvania State University each indicated that they had no current information on gas compressor noise control available; however, they would research specific noise-related topics, if requested.

3.10 RESEARCH RECOMMENDATIONS

3.10.1 Active Noise Control

One noise-control technique of potentially great significance to the natural gas industry is active noise control. Basically, the system is composed of a sound receiver (microphone), signal decoder, and sound transmitter (speaker). The receiver monitors the acoustic characteristics of the noise source. This monitoring information is sent to the signal decoder, where the sound is broken into its component parts. Sound, which is typically out of phase in relation to the noise source, is then sent to the sound transmitter and broadcast at the source's sound wave. The resultant meeting of the two waves cancels the noise, creating a "quiet" piece of equipment.

This type of noise control is most effective for low-frequency sound. It works, in effect, by cutting the peaks off pure tone noise spectrum constituents. A pure tone noise is generally considered more annoying than broad-band noise. Therefore, removal of these peaks, creates a more evenly distributed, less annoying broad-band noise.

Passive silencers currently in use for controlling noise emissions from compressor drive engine exhaust stacks are most efficient for the control of higher frequency sound. The use of active noise control as an enhancement to control low-frequency noise control offers strong possibilities for further research. Digisonix of Middleton, Wisconsin, is an industry leader in research and development of active noise-control systems.

3.10.2 Active Vibration Isolation

This is a relatively new technology that operates using the same physical properties as active noise control, i.e., a wave is detected and an out-of-phase wave is transmitted to cancel it. Instead of a sound wave, however, the canceling signal drives actuators that cancel the detected vibration.

Active vibration isolation is most effective for low-frequency vibration, which makes up the greatest proportion of energy transmitted to structural members. At the present time, research is being conducted by a partnership of Active Noise and Vibration Technologies, Inc., of Phoenix, Arizona, and Moog, Inc., of East Aurora, New York. Efforts have been aimed at developing an active vibration isolation system for automobile engines.

This emerging technology has great potential for gas compressor industry research and ultimate usage as a noise-control option.

Table 3-1

NOISE-CONTROL EQUIPMENT VENDORS

Company	Telephone Number
Active Noise and Vibration Technologies	214/739-2688
American Air Filter	502/637-0011
Central Metal Fabricators	305/261-6262
Digisonix	608/836-3999
Flaregas Corporation	914/352-8877
Industrial Noise Control, Inc.	708/620-1998
Illbruck	800/662-0032
Kinetics Noise Control	614/889-0480
The Proudfoot Company	203/459-0031
VANEC	214/243-1951

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Table 3-2

NOISE-CONTROL RESOURCES

Organization	Telephone Number
American Gas Association	703/841-8416
American Petroleum Institute	202/682-8000
Auburn University	205/844-4000
Electric Power Research Institute	415/855-2000
Gas Research Institute	312/399-8100
Pennsylvania State University	814/865-6364

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Table 3-3

RESEARCH INSTITUTE AND UNIVERSITY
NOISE-CONTROL PUBLICATIONS

American Gas Association

Handbook of Noise Control at Gas Pipeline Facilities, Catalog Number L00377, 1977.

Noise Research and Noise Projection Models Applicable to Natural Gas Pipelines (Catalog number L51542), 1987.

Auburn University

Noise Control Engineering Journal, Institute of Noise Control Engineering, P.O. Box 3206, Arlington Branch, Poughkeepsie, NY 12601

Electric Power Research Institute

Noise Control at Fossil Fuel Power Plants: Industry Wide Assessment of Costs and Benefits, Document number CS-3262, 1983.

Preliminary Design Study of Compressed Air Energy Storage in a Salt Dome, Volume 4, CAES Turbo Machinery Design, Document Number EM-2210, 1982.

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4. INGAA NOISE LEGISLATION REVIEW QUESTIONNAIRE

An important facet of this project was solicitation of INGAA member responses to experiences with noise regulations and types of noise-control techniques that they use. To accomplish this task, E & E prepared a questionnaire that was forwarded to members through INGAA. The questionnaire is presented in Figure 4-1.

A total of 16 firms responded to the survey. Their responses are summarized in this section.

4.1 LOCATIONS

Facilities were located in 41 of the continental 48 states. No gas compressor stations were located in California, Delaware, Florida, Maine, New Hampshire, Nevada, Vermont, or the District of Columbia.

4.2 FERC NOISE REQUIREMENTS

Eleven companies indicated that they had no difficulty meeting FERC noise requirements. Three responded that they had or may have problems retrofitting existing equipment into FERC compliance. Two members indicated that prior to obtaining FERC approval, it was necessary to employ additional noise-control equipment.

One respondent indicated that his firm usually does not have trouble meeting FERC noise requirements for compression equipment, but that he sometimes experiences noise emission problems with other facility equipment.

4.3 STATE NOISE REQUIREMENTS

All firms except two indicated that they had not experienced any problems in meeting state noise requirements. One indicated that in order to achieve compliance, it was necessary to provide additional noise-control measures; the other said that noise became an issue when residences were built close to an existing station.

4.4 LOCAL NOISE REQUIREMENTS

Two members answered that they had experienced problems meeting local noise ordinance requirements. Both said that the levels exceeded were based on nuisance noise standards.

4.5 NATURAL GAS COMPRESSOR MANUFACTURERS

A total of 21 different manufacturers supply the gas compressor equipment used at facilities operated by the 16 respondents. A list of manufacturers is presented in Table 4-1. Some of these manufacturers were contacted for additional information, which is presented in Section 3 of this report.

4.6 COMPRESSOR NOISE CONTROL

All respondents used inlet and exhaust silencers on their compressor equipment. Acoustical performance rating of silencers ranged from standard to hospital grade.

A number of other noise-control devices were mentioned. These are listed in Table 4-2. Manufacturers and vendors of these items were contacted in compiling information appearing in Section 3.

4.7 OTHER NOISE SOURCES

In addition to compressor noise, other types of equipment in use at company facilities were identified as potential noise sources. A list of these is presented in Table 4-3. Noise-control techniques for these sources are discussed in Section 3.

4.8 PERIODIC NOISE ASSESSMENTS

Eleven companies indicated that they do not perform periodic noise assessments. The remaining five answered that they do perform some type of periodic noise measurement.

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Table 4-1

ENGINE AND TURBINE MANUFACTURERS

Company
Ajax
Allison
Ariel
Caterpillar
Chicago-Pneumatic
Clark
Clark/Garret
Cooper-Bessemer
Delaval
Enterprise-Delaval
General Electric
Ingersoll-Rand
Norberg
Pratt-Whitney
Rolls-Royce
Solar
Superior
Waukesha
Westinghouse
White Superior
Worthington

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Table 4-2

**COMPRESSOR NOISE-CONTROL
EQUIPMENT/TECHNIQUES**

Equipment/Technique
Inlet and exhaust silencers
Starter gas "muffler"
Acoustic insulation
Sound barriers (walls)
Use of low-speed fans
Architectural design
Building/equipment orientation
Landscaping
Discharge pipe dampening/ insulation

Compiled by Ecology and
Environment, Inc. 1992.

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Table 4-3
OTHER NOISE SOURCES

Noise Source
Air intakes
Building construction
Coolers
Engine blowdown
Fin fan Coolers
Heaters
Hydraulic oil piping
Piping noise
Regulators
Relief valves
Surge valves
Turbochargers
Vaporizers

Compiled by Ecology and
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INGAA NOISE LEGISLATION REVIEW QUESTIONNAIRE

COMPANY:

ADDRESS:

CONTACT:

TELEPHONE:

1. Indicate states in which gas compressor facilities are located.

AL	IN	MT	PA
AZ	IA	NE	RI
AR	KS	NV	SC
CA	KY	NH	SD
CO	LA	NV	TN
CT	ME	NM	TX
DE	MD	NY	UT
DC	MA	NC	VT
FL	MI	ND	VA
GA	MN	OH	WA
ID	MS	OK	WV
IL	MO	OR	WI
			WY

2. Has the company ever experienced difficulty meeting FERC noise requirements? Please describe briefly.

3. Has the company ever experienced difficulty meeting state noise requirements? Please indicate which state(s) and provide a brief description of the problem.

Figure 4-1

INGAA QUESTIONNAIRE

INGAA NOISE LEGISLATION REVIEW QUESTIONNAIRE

4. Has the company ever experienced difficulty meeting local noise requirements? Please indicate which locality and provide a brief description of the problem.

5. What manufacturer/type/model of natural gas compressor units are used at company facilities?

6. What type(s) of compressor noise control equipment is utilized at company facilities?

7. Besides compressors, are there any other noise sources which typically require control? Please list and indicate control technique.

Figure 4-1 (Cont.)

INGAA NOISE LEGISLATION REVIEW QUESTIONNAIRE

8. Does the company perform periodic noise assessments to assure compliance with mandated noise levels?

9. Comments:

Figure 4-1 (Cont.)

APPENDIX A

GLOSSARY OF TERMS

GLOSSARY OF TERMS

Ambient Noise - The all-encompassing noise associated with a given environment. Ambient noise is usually composed of sounds from many sources.

Audible Range (of Frequency) (Audio-Frequency Range) - The frequency range 16 Hz to 20,000 Hz (20kHz). This is conventionally taken to be the normal frequency of human hearing.

A-Weighted Sound Level - A quantity, in dB, read from a standard sound-level meter with A-weighting circuitry. The A-scale weighting discriminates against the lower frequencies according to a relationship approximating the auditory sensitivity of the human ear. The A-scale sound level measures approximately the relative "noisiness" or "annoyance" of many common sounds.

Broad-Band Noise - Noise whose energy is distributed over a broad range of frequency (generally more than one octave).

Continuous Noise - On-going noise whose intensity remains at a measurable level (which may vary) without interruption over an indefinite or a specified period of time.

Day-Night Average Sound Level (L_{dn}) - The 24-hour A-weighted sound level, with a 10-dB weighting applied to the nighttime levels (from 2200 to 0700 hours). The concept is based on the premise that individuals

are more annoyed by a given level of noise during nominal sleep hours than in the daytime.

Decibel (dB) - The decibel is a dimensionless, logarithmic unit of measure of sound pressure.

Directivity (of sound sources) - Relating to the phenomenon that, in practice, most sound sources do not radiate sound with equal intensity in all directions.

Equivalent Sound Level (L_{eq}) - The level of the mean square A-weighted sound pressure over a given time interval. The time interval over which the measurement is taken should always be specified.

Far-Field Sound Field - Area of wave propagation where sound waves are traveling radially outward from the acoustic center. Measured sound-pressure levels will decrease 6 dB for each doubling of distance. Sound-pressure measurements should be performed under far-field conditions.

Frequency - Number of complete oscillation cycles per unit of time. The unit of frequency often used is the Hertz (Hz).

Frequency Band - Difference in Hertz between the upper and lower frequencies that delimit a band, or the interval in octaves between the two frequencies. The band is located by the geometric mean frequency between the two band-edge frequencies. An example is an octave band centered at 500 Hz, or, more simply, a 500-Hz octave band.

Hertz - Unit of frequency equal to 1 cycle per second.

Impulse Noise (Impulsive Noise) - Noise of short duration (typically less than 1 second), especially of high intensity, abrupt onset, and rapid decay, and often rapidly changing spectral composition. Impulse noise is characteristically associated with such sources as explosions, impacts, and many industrial processes.

Near-Field Sound Field - Area of wave propagation existing near a sound source where sound waves form a turbulent acoustic field with the wave amplitude varying in an almost random fashion.

Pure Tone Noise - Noise whose energy is concentrated in a single frequency band.

Sound-Level Meter - An instrument that provides a direct reading of the sound-pressure level at a particular location. A sound-level meter consists of a microphone and electronic amplifier together with a meter having a scale graded in dB. Standard sound-level meters must satisfy the requirements of American National Standards Institute (ANSI) Specification for Sound Level Meters, S1.4-1971.

Sound Pressure - The sound pressure at a point in a sound field is a measure of the fluctuating variations in pressure from the static value (i.e., atmospheric pressure) caused by the presence of the sound field. For most complex sound sources, the sound pressure contains energy over a broad frequency range audible to humans.

Sound-Pressure Level (SPL) - The range in sound pressures is greater than a factor of one million, from the minimum audible sound waves to those present in the vicinity of a modern jet airplane. A measure of the sound pressures is therefore more convenient on a reduced scale. A logarithmic scale is used in which equal increments correspond to equal multiples of sound pressure; the reference pressure corresponds approximately to the minimum audible sound pressure. This is a convenient scale to use since the ear responds to sound waves in a similar manner. On such a scale, the measurement of sound pressure is termed SPL, the units being the dB.

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APPENDIX B

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BIBLIOGRAPHY

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APPENDIX C

STATE NOISE REGULATIONS

CONNECTICUT NOISE REGULATIONS

REGULATIONS OF
CONNECTICUT STATE AGENCIES



TITLE 22a

ENVIRONMENTAL PROTECTION

SECTION 22a-69-1 TO 22a-69-7.4

CONTROL OF NOISE

Department of Environmental Protection

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Control of Noise

Sec. 22a-69-1. Definitions

Sec. 22a-69-1.1. General

(a) **adaptive reuse** means remodeling and conversion of an obsolete or unused building or other structure for alternate uses. For example, older industrial buildings, warehouses, offices, hotels, garages, etc., could be improved and converted for reuse in terms of industrial processes, commercial activities, educational purposes, residential use as apartments, or other purposes.

(b) **aircraft** means any engine-powered device that is used or intended to be used for flight in the air and capable of carrying humans. Aircraft shall include civil, military, general aviation and VTOL/STOL aircraft.

(i) **aircraft, STOL** means any aircraft designed for, and capable of, short take-off and landing operations.

(ii) **aircraft, VTOL** means any aircraft designed for, and capable of, vertical take-off and landing operations such as, but not limited to, helicopters.

(c) **airport** means an area of land or water that is used, or intended to be used, for the landing and takeoff of aircraft and is licensed by the State of Connecticut Bureau of Aeronautics for such use. "Airport" shall include all buildings and facilities if any. "Airport" shall include any facility used, or intended for use, as a landing and take-off area for VTOL/STOL aircraft, including, but not limited to, heliports.

(d) **ANSI** means the American National Standards Institute or its successor body.

(e) **best practical noise control measures** means noise control devices, technology and procedures which are determined by the Commissioner to be the best practical, taking into consideration the age of the equipment and facilities involved, the process employed, capital expenditures, maintenance cost, technical feasibility, and the engineering aspects of the applicable noise control techniques in relation to the control achieved and the non-noise control environmental impact.

(f) **commissioner** means the Commissioner of the Department of Environmental Protection or his/her designated representative.

(g) **construction** means any, and all, physical activity at a site necessary or incidental to the erection, placement, demolition, assembling, altering, blasting, cleaning, repairing, installing, or equipping of buildings or other structures, public or private highways, roads, premises, parks, utility lines, or other property, and shall include, but not be limited to, land clearing, grading, excavating, filling and paving.

(h) **daytime** means 7:00 a.m. to 10:00 p.m. local time.

(i) **director** means the Director of the Office of Noise Control in the Department of Environmental Protection.

(j) **emergency** means any occurrence involving actual or imminent danger to persons or damage to property which demands immediate action.

(k) **intrusion alarm** means a device with an audible signal which, when activated, indicates intrusion by an unauthorized person. Such alarm may be attached to, or within, any building, structure, property or vehicle.

(l) **ISO** means the International Organization for Standardization, or its successor body.

(m) **lawn care and maintenance equipment** means all engine or motor-powered garden or maintenance tools intended for repetitive use in residential areas, typically capable of being used by a homeowner, and including, but not limited to, lawn mowers, riding tractors, snowblowers, and including equipment intended for infrequent service work in inhabited areas, typically requiring skilled operators, including, but not limited to, chain saws, log chippers or paving rollers.

(n) **nighttime** means 10:00 p.m. to 7:00 a.m. local time.

(o) **noise zone** means an individual unit of land or a group of contiguous parcels under the same ownership as indicated by public land records and, as relates to noise emitters, includes contiguous publicly dedicated street and highway rights-of-way, railroad rights-of-way and waters of the State.

(p) **office of noise control** means the office within the Department of Environmental Protection designated by the Commissioner to develop, administer and enforce the provisions of Chapter 442 of the Connecticut General Statutes.

(q) **OSHA** means the Occupational Safety and Health Act and any amendments thereto or successor regulations administered by the U.S. and Connecticut Departments of Labor, or successor bodies.

(r) **person** means any individual, firm, partnership, association, syndicate, company, trust, corporation, municipality, agency, or political or administrative subdivision of the State or other legal entity of any kind.

(s) **public emergency sound signal** means an audible electronic or mechanical siren or signal device attached to an authorized emergency vehicle or within or attached to a building for the purpose of sounding an alarm relating to fire or civil preparedness. Such signal may also be attached to a pole or other structure.

(t) **SAE** means the Society of Automotive Engineers, Inc., or its successor body.

(u) **safety and protective devices** means devices that are designed to be used, and are actually used, for the prevention of the exposure of any person or property to imminent danger, including, but not limited to, unregulated safety relief valves, circuit breakers, protective

fuses, back-up alarms required by OSHA or other state or federal safety regulations, horns, whistles or other warning devices associated with pressure buildup.

(v) **site** means the area bounded by the property line on or in which a source of noise exists.

(Effective June 15, 1978)

Sec. 22a-69-1.2. Acoustic terminology and definitions

(a) All acoustical terminology used in these Regulations shall be in conformance with the American National Standards Institute (ANSI), "Acoustical Terminology," contained in publication S1.1 as now exists and as may be hereafter modified. The definitions below shall apply if the particular term is not defined in the aforesaid ANSI publication.

(b) **audible range of frequency** means the frequency range 20 Hz to 20,000 Hz which is generally considered to be the normal range of human hearing.

(c) **background noise** means noise which exists at a point as a result of the combination of many distant sources, individually indistinguishable. In statistical terms, it is the level which is exceeded 90% of the time (L_{90}) in which the measurement is taken.

(d) **continuous noise** means ongoing noise, the intensity of which remains at a measurable level (which may vary) without interruption over an indefinite period or a specified period of time.

(e) **decibel (dB)** means a unit of measurement of the sound level.

(f) **excessive noise** means emitter Noise Zone levels from stationary noise sources exceeding the Standards set forth in Section 3 of these Regulations beyond the boundary of adjacent Noise Zones.

(g) **existing noise source** means any noise source(s) within a given Noise Zone, the construction of which commenced prior to the effective date of these Regulations.

(h) **fluctuating noise** means a continuous noise whose level varies with time by more than 5 dB.

(i) **frequency** means the number of vibrations or alterations of sound pressure per second and is expressed in Hertz.

(j) **hertz (Hz)** means a unit of measurement of frequency formerly stated as, and numerically equal to, cycles per second.

(k) **impulse noise** means noise of short duration (generally less than one second), especially of high intensity, abrupt onset and rapid decay, and often rapidly changing spectral composition.

(l) **infrasonic sound** means sound pressure variations having frequencies below the audible range for humans, generally below 20 Hz; subaudible.

(m) L_{10} means the A-weighted sound level exceeded 10% of the time period during which measurement was made.

(n) L_{50} means the A-weighted sound level exceeded 50% of the time period during which measurement was made.

(o) L_{90} means the A-weighted sound level exceeded 90% of the time period during which measurement was made.

(p) **octave band sound pressure level** means the sound pressure level for the sound contained within the specified preferred octave band, stated in dB, as described in ANSI S1.6-1967: Preferred Frequencies and Band Numbers for Acoustical Measurements.

(q) **peak sound pressure level** means the absolute maximum value of the instantaneous sound pressure level occurring in a specified period of time.

(r) **prominent discrete tone** means the presence of acoustic energy concentrated in a narrow frequency range, including, but not limited to, an audible tone, which produces a one-third octave sound pressure level greater than that of either adjacent one-third octave and which exceeds the arithmetic average of the two adjacent one-third octave band levels by an amount greater than shown below opposite the center of frequency for the one-third octave band containing the concentration of acoustical energy.

<i>1/3 Octave Band Center Frequency (Hz)</i>	<i>dB</i>
100	16
125	14
160	12
200	11
250	9
315	8
400	7
500	6
630	6
800	5
1000	4
1250	4
1600	4
2000	3
2500	3
3150	3
4000	3
5000	4
6300	4
8000	5
10000	6

(s) **reference pressure** is 0.00002 Newtons per square meter (N/M^2), or 20 microPascals, for the purposes of these Regulations.

(t) **sound** means a transmission of energy through solid, liquid, or gaseous media in the form of vibrations which constitute alterations in pressure or position of

the particles in the medium and which, in air, evoke physiological sensations, including, but not limited to, an auditory response when impinging on the ear.

(u) **sound analyzer** means a device, generally used in conjunction with a sound level meter, for measuring the sound pressure level of a noise as a function of frequency in octave bands, one-third octave bands or other standard ranges. The sound analyzer shall conform to Type E, Class II, as specified in ANSI S1.11-1971 or latest revision.

(v) **sound level** means a frequency weighted sound pressure level, obtained by the use of metering characteristics and the weighting A, B, or C as specified in ANSI, "Specifications for Sound Level Meters," S1.4-1971 or latest revision. The unit of measurement is the decibel. The weighting employed must always be stated as dBA, dBB, or dBC.

(w) **sound level meter** means an instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement of sound levels. The sound level meter shall conform to ANSI Specifications for Sound Level Meters S1.4-1971.

(x) **sound pressure level (SPL)** means twenty times the logarithm to the base ten of the ratio of the sound pressure in question to the standard reference pressure of 0.00002 N/M². It is expressed in decible units.

(y) **ultrasonic sound** means sound pressure variations having frequencies above the audible sound spectrum for humans, generally higher than 20,000 Hz; superaudible.

(z) **vibration** means an ascillatory motion of solid bodies of deterministic or random nature described by displacement, velocity, or acceleration with respect to a given reference point.

(Effective June 15, 1978)

Sec. 22a-69-1.3. Coordination with other laws

(a) Nothing in these Regulations shall authorize the construction or operation of a stationary noise source in violation of the requirements of any other applicable State law or regulation.

(b) Nothing in these Regulations shall authorize the sale, use or operation of a noise source in violation of the laws and regulations of the Connecticut Department of Motor Vehicles, the Federal Aviation Administration, the U.S. Environmental Protection Agency, or any amendments thereto.

(Effective June 15, 1978)

Sec. 22a-69-1.4. Incorporation by reference

(a) The specifications, standards and codes of agencies of the U.S. Government and organizations which are not agencies of the U.S. Government, to the extent that they are legally incorporated by reference in these Regulations, have the same force and effect as other standards in these Regulations.

(b) These specifications, standards and codes may be examined at the Office of Noise Control, Department of Environmental Protection, State of Connecticut.

(c) Any changes in the specifications, standards and codes incorporated in these Regulations are available at the Office listed in (b) above. All questions as to the applicability of such changes should also be referred to this Office.

(Effective June 15, 1978)

Sec. 22a-69-1.5. Compliance with regulations no defense to nuisance claim

Nothing in any portion of these Regulations shall in any manner be construed as authorizing or legalizing the creation or maintenance of a nuisance, and compliance of a source with these Regulations is not a bar to a claim of nuisance by any person. A violation of any portion of these Regulations shall not be deemed to create a nuisance per se.

(Effective June 15, 1978)

Sec. 22a-69-1.6. Severability

If any provision of these Regulations or the application thereof to any person or circumstances is held to be invalid, such invalidity shall not affect other provisions or applications of any other part of these Regulations which can be given effect without the invalid provisions or application; and to this end, the provisions of these Regulations and the various applications thereof are declared to be severable.

(Effective June 15, 1978)

Sec. 22a-69-1.7. Exclusions

These Regulations shall not apply to:

(a) Sound generated by natural phenomena, including, but not limited to, wind, storms, insects, amphibious creatures, birds, and water flowing in its natural course.

(b) The unamplified sounding of the human voice.

(c) The unamplified sound made by any wild or domestic animal.

(d) Sound created by bells, carillons, or chimes associated with specific religious observances.

(e) Sound created by a public emergency sound signal attached to an authorized emergency vehicle in the immediate act of responding to an emergency, as authorized by subsection (d) of Section 14.80 and Section 14-1a of Chapter 246 of the General Statutes and all amendments thereto, or located within or attached to a building, pole or other structure for the purpose of sounding an alarm relating to fire or civil preparedness.

(f) Sound created by safety and protective devices.

(g) Farming equipment or farming activity.

(h) Back-up alarms required by OSHA or other State or Federal safety regulations.

(i) Sound created by any mobile source of noise. Mobile sources of noise shall include, but are not limited to, such sources as aircraft, automobiles, trucks, and boats. This exclusion shall cease to apply when a mobile source of noise has maneuvered into position at the loading dock, or similar facility, has turned off its engine and ancillary equipment, and has begun the physical process of removing the contents of the vehicle.

(Effective June 15, 1978)

Sec. 22a-69-1.8. Exemptions

Exempted from these Regulations are:

(a) Conditions caused by natural phenomena, strike, riot, catastrophe, or other condition over which the apparent violator has no control.

(b) Noise generated by engine-powered or motor-driven lawn care or maintenance equipment shall be exempted between the hours of 7:00 a.m. and 9:00 p.m. provided that noise discharged from exhausts is adequately muffled to prevent loud and/or explosive noises therefrom.

(c) Noises created by snow removal equipment at any time shall be exempted provided that such equipment shall be maintained in good repair so as to minimize noise, and noise discharged from exhausts shall be adequately muffled to prevent loud and/or explosive noises therefrom.

(d) Noise that originates at airports that is directly caused by aircraft flight operations specifically preempted by the Federal Aviation Administration.

(e) Noise created by the use of property for purposes of conducting speed or endurance events involving motor vehicles shall be exempted but such exemption is effective only during the specific period(s) of time within which such use is authorized by the political subdivision or governmental entity having lawful jurisdiction to sanction such use.

(f) Noise created as a result of, or relating to, an emergency.

(g) Construction noise.

(h) Noise created by blasting other than that conducted in connection with construction activities shall be exempted provided that the blasting is conducted between 8:00 a.m. and 5:00 p.m. local time at specified hours previously announced to the local public, or provided that a permit for such blasting has been obtained from local authorities.

(i) Noise created by on-site recreational or sporting activity which is sanctioned by the state or local government provided that noise discharged from exhausts is adequately muffled to prevent loud and/or explosive noises therefrom.

(j) Patriotic or public celebrations not extending longer than one calendar day.

(k) Noise created by aircraft, or aircraft propulsion components designed for or utilized in the development of aircraft, under test conditions.

(l) Noise created by products undergoing test, where one of the primary purposes of the test is evaluation of product noise characteristics and where practical noise control measures have been taken.

(m) Noise generated by transmission facilities, distribution facilities and substations of public utilities providing electrical powers, telephone, cable television or other similar services and located on property which is not owned by the public utility and which may or may not be within utility easements.

(Effective June 15, 1978)

Sec. 22a-69-1.9. Burden of persuasion regarding exclusions and exemptions

In any proceeding pursuant to these Regulations, the burden of persuasion shall rest with the party attempting to enforce the Regulations. Notwithstanding the foregoing, if an exclusion or exemption stated in these Regulations would limit an obligation, limit a liability, or eliminate either an obligation or a liability, the person who would benefit from the application of the exclusion or exemption shall have the burden of persuasion that the exclusion or exemption applies and that the terms of the exclusion or exemption have been met. The Department shall cooperate with and assist persons in determining the application of the provisions of these Regulations.

(Effective June 15, 1978)

Sec. 22a-69-2. Classification of land according to use

Sec. 22a-69-2.1. Basis

Noisy Zone classifications shall be based on the actual use of any parcel or tract under single ownership as detailed by the Standard Land Use Classification Manual of Connecticut (SLUCONN).

(Effective June 15, 1978)

Sec. 22a-69-2.2. Multiple uses

Where multiple uses exist within a given Noise Zone, the least restrictive land use category for the Emitter and Receptor shall apply regarding the noise standards specified in Section 3 of these Regulations.

(Effective June 15, 1978)

Sec. 22a-69-2.3. Class A noise zone

Lands designated Class A shall generally be residential areas where human beings sleep or areas where serenity and tranquility are essential to the intended use of the land.

Class A Land Use Category. The land uses in this category shall include, but not be limited to, single and multiple family homes, hotels, prisons, hospitals, religious facilities, cultural activities, forest preserves, and land intended for residential or special uses requiring such protection.

The specific SLUCONN categories in Class A shall include:

1. Residential
 - 11 Household Units*
 - 12 Group Quarters
 - 13 Mobile Home Parks and Courts
 - 19 Other Residential
 5. Trade
 - 583 Residential Hotels
 - 584 Hotels, Tourist Courts and Motels
 - 585 Transient Lodgings
 6. Services
 - 651 Medical and Other Health Services; Hospitals
 - 674 Correctional Institutions
 - 691 Religious Activities
 7. Cultural, Entertainment and Recreational
 - 711 Cultural Activities
 - 712 Nature Exhibitions
 - 713 Historic and Monument Sites
- *Mobile homes are included if on foundations
9. Undeveloped, Unused and Reserved Lands and Water Areas
 - 92 Reserved Lands
 - 941 Vacant Floor Area—Residential
(Effective June 15, 1978)

Sec. 22a-69-2.4. Class B noise zone

Lands designated Class B shall generally be commercial in nature, areas where human beings converse and such conversation is essential to the intended use of the land.

Class B Land Use Category. The land uses in this category shall include, but not be limited to, retail trade, personal, business and legal services, educational institutions, government services, amusements, agricultural activities, and lands intended for such commercial or institutional uses.

The specific SLUCONN categories in Class B shall include:

4. Transportation, Communication and Utilities
 - 46 Automobile Parking
 - 47 Communication
5. Trade
 - 51 Wholesale Trade
 - 52 Retail Trade - Building Materials
 - 53 Retail Trade - General Merchandise
 - 54 Retail Trade - Food

- 55 Retail Trade - Automotive Dealers and Gasoline Service Stations
- 56 Retail Trade - Apparel and Accessories
- 57 Retail Trade - Furniture, Home Furnishings and Equipment
- 58 Retail Trade - Eating, Drinking and Lodging—Except 583, 584, and 585
- 59 Retail Trade - N.E.C.*
- 6. Services
 - 61 Finance, Insurance and Real Estate Services
 - 62 Personal Services
 - 63 Business Services—Except 637
 - 64 Repair Services
 - 65 Professional Services—Except 651
 - 67 Government Services—Except 672, 674, and 675
 - 68 Educational Services
 - 69 Miscellaneous Services—Except 691
- 7. Cultural, Entertainment and Recreational
 - 71 Cultural Activities and Nature Exhibitions—Except 711, 712, and 713
 - 72 Public Assembly
 - 73 Amusements
 - 74 Recreational Activities
 - 75 Resorts and Group Camps
 - 76 Parks
 - 79 Other, N.E.C.*
- *Not Elsewhere Classified
 - 8. Agriculture
 - 81 Agriculture
 - 82 Agricultural Related Activities
 - 9. Undeveloped, Unused, and Reserved Lands and Water Area
 - 91 Undeveloped and Unused Land Area
 - 93 Water Areas
 - 94 Vacant Floor Area—Except 941
 - 99 Other Undeveloped Land and Water Areas, N.E.C.*
- *Not Elsewhere Classified
(Effective June 15, 1978)

Sec. 22a-69-2.5. Class C noise zone

Lands designated Class C shall generally be industrial where protection against damage to hearing is essential, and the necessity for conversation is limited.

Class C Land Use Category. The land uses in this category shall include, but not be limited to, manufacturing activities, transportation facilities, warehousing, military bases, mining, and other lands intended for such uses.

The specific SLUCONN categories in Class C shall include:

- 2. Manufacturing - Secondary Raw Materials
- 3. Manufacturing - Primary Raw Materials

4. Transportation, Communications and Utilities—
Except 46 and 47

6. Services

637 Warehousing and Storage Services

66 Contract Construction Services

672 Protective Functions and Related Activities

675 Military Bases and Reservations

8. Agriculture

83 Forestry Activities and Related Services

84 Commercial Fishing Activities and Related Services

85 Mining Activities and Related Services

89 Other Resource Production and Extraction, N.E.C.*

*Not Elsewhere Classified

(Effective June 15, 1978)

Sec. 22a-69-3. Allowable noise levels

Sec. 22a-69-3.1. General prohibition

No person shall cause or allow the emission of excessive noise beyond the boundaries of his/her Noise Zone so as to violate any provisions of these Regulations.

(Effective June 15, 1978)

Sec. 22a-69-3.2. Impulse noise

(a) No person shall cause or allow the emission of impulse noise in excess of 80 dB peak sound pressure level during the nighttime to any Class A Noise Zone.

(b) No person shall cause or allow the emission of impulse noise in excess of 100 dB peak sound pressure at any time to any Noise Zone.

(Effective June 15, 1978)

Sec. 22a-69-3.3. Prominent discrete tones

Continuous noise measured beyond the boundary of the Noise Zone of the noise emitter in any other Noise Zone which possesses one or more audible discrete tones shall be considered excessive noise when a level of 5 dBA below the levels specified in Section 3 of these Regulations is exceeded.

(Effective June 15, 1978)

Sec. 22a-69-3.4. Infrasonic and ultrasonic

No person shall emit beyond his/her property infrasonic or ultrasonic sound in excess of 100 dB at any time.

(Effective June 15, 1978)

Sec. 22a-69-3.5. Noise zone standards

(a) No person in a Class C Noise Zone shall emit noise exceeding the levels stated herein and applicable to adjacent Noise Zones:

	<i>Receptor</i>			
	<i>C</i>	<i>B</i>	<i>A/Day</i>	<i>A/Night</i>
<i>Class C Emitter to</i>	70 dBA	68 dBA	61 dBA	51 dBA

Levels emitted in excess of the values listed above shall be considered excessive noise.

(b) No person in a Class B Noise Zone shall emit noise exceeding the levels stated herein and applicable to adjacent Noise Zones:

Class B Emitter to	Receptor			
	C	B	A/Day	A/Night
	62 dBA	62 dBA	65 dBA	45 dBA

Levels emitted in excess of the values listed above shall be considered excessive noise.

(c) No person in a Class A Noise Zone shall emit noise exceeding the levels stated herein and applicable to adjacent Noise Zones:

Class A Emitter to	Receptor			
	C	B	A/Day	A/Night
	62 dBA	55 dBA	65 dBA	45 dBA

Levels emitted in excess of the values listed above shall be considered excessive noise.

(Effective June 15, 1978)

Sec. 22a-69-3.6. High background noise areas

In those individual cases where the background noise levels caused by sources not subject to these Regulations exceed the standards contained herein, a source shall be considered to cause excessive noise if the noise emitted by such source exceeds the background noise level by 5 dBA, provided that no source subject to the provisions of Section 3 shall emit noise in excess of 80 dBA at any time, and provided that this Section does not decrease the permissible levels of the other Sections of this Regulation.

(Effective June 15, 1978)

Sec. 22a-69-3.7. Existing noise sources

Existing noise sources constructed between the effective date of these Regulations and January 1, 1960 shall be provided a permanent five (5) dBA maximum noise level allowance over levels otherwise herein required regardless of subsequent changes in ownership or facility utilization processes at the location of the existing noise source. Existing noise sources constructed prior to 1960 shall be provided a permanent ten (10) dBA maximum noise level allowance over levels otherwise herein required regardless of subsequent changes in ownership or facility utilization processes at the location of the existing noise source. Additionally, all existing noise sources shall be provided twenty-four (24) months in order to achieve compliance with these Regulations if a notice of violation has been, or may be, issued to the source. This time period begins with the effective date of these Regulations, not with the date of the notice of violation.

(Effective June 15, 1978)

Sec. 22a-69-3.8. Adaptive reuse of existing buildings

Buildings and other structures that exist as of the effective date of these Regulations which have been remodeled or converted for adaptive reuse or which may be remodeled or converted at a future date shall be provided a permanent five (5) dBA maximum noise level allowance above the Emitter Class of the new use of the building over levels otherwise herein required.

(Effective June 15, 1978)

Sec. 22a-69-4. Measurement procedures

Acoustic measurements to ascertain compliance with these Regulations shall be in substantial conformity with standards and Recommended Practices established by professional organizations such as ANSI and SAE.

(a) Personnel conducting sound measurements shall be trained and experienced in the current techniques and principles of sound measuring equipment and instrumentation. The Commissioner shall establish sufficiently detailed measurement procedure guidelines specifying, but not necessarily being limited to, the following: The appropriate utilization of fast or slow sound level meter dampening when making sound level measurements, the rise time specified in microseconds for measuring impulse noise, the need for a whole circuit in such measurements, and the proper weighting to be used in measuring impulse noise.

(b) Instruments shall conform to the following standards of their latest revisions:

(i) ANSI S1.4-1971, "Specifications for Sound Level Meters," Type 1 or 2.

(ii) ANSI S1.11-1966, "Specifications for Octave, One-Half Octave and One-Third Octave Band Filter Sets," Type E, Class II.

(iii) If a magnetic tape recorder or a graphic level recorder or other indicating device is used, the system shall meet the applicable requirements of SAE Recommended Practice J184, "Qualifying a Sound Data Acquisition System."

(c) Instruments shall be set up to conform to ANSI S1.13-1971, "Methods for the Measurement of Sound Pressure Levels."

(d) Instrument manufacturer's instructions for use of the instruments shall be followed, including acoustical calibration of equipment used.

(e) The determination of L_{90} to ascertain background levels requires a statistical analysis. A graphic level recording and visual interpretation of the chart recording to determine the levels is an acceptable method. Instruments designed to determine the cumulative distribution of noise levels are also acceptable used either in the field or in the laboratory to analyze a tape recording. Dynamic visual estimations from a sound level meter

are not an acceptable method for determining such levels. Sound level sampling techniques are acceptable and will often be the most practical to employ. Such a technique using Connecticut Noise Survey Data Form #101 with accompanying instructions is acceptable.

(f) In measuring compliance with Noise Zone Standards, the following short-term noise level excursions over the noise level standards established by these Regulations shall be allowed, and measurements within these ranges of established standards shall constitute compliance therewith:

Allowable levels above standards (dB)	Time period of such levels (minutes/hour)
3	15
6	7 1/2
8	5

(g) Measurements taken to determine compliance with Section 3 shall be taken at about one foot beyond the boundary of the Emitter Noise Zone within the receptor's Noise Zone. The Emitter's Noise Zone includes his/her individual unit of land or group of contiguous parcels under the same ownership as indicated by public land records. The Emitter's Noise Zone also includes contiguous publicly dedicated street and highway rights-of-way, railroads rights-of-way and waters of the State.
(Effective June 15, 1978)

Sec. 22a-69-5. Other provisions

Sec. 22a-69-5.1. Intrusion alarms

No person shall cause, suffer, allow or permit the operation of any intrusion alarm which, from time of activation of audible signal, emits noise for a period of time exceeding ten minutes when attached to any vehicle or thirty minutes when attached to any building or structure.

The repetition of activation of the audible signal of an intrusion alarm due to malfunction, lack of proper maintenance, or lack of reasonable care shall be considered excessive noise.

(Effective June 15, 1978)

Sec. 22a-69-6. Airport facilities

Sec. 22a-69-6.1. Extent of regulation

Airport facilities are subject to Section 3 to the extent not preempted by state or federal law or regulation.

(Effective June 15, 1978)

Sec. 22a-69-6.2. Reserved

(This subsection is reserved for possible future regulations regarding the assessment of, and long-range plans

for, the reduction of airport facility noise impacts to the extent not preempted by state or federal law or regulation.)

(Effective June 15, 1978)

Sec. 22a-69-7. Variances and enforcement procedures

Sec. 22a-69-7.1. Variances

(a) Any person who owns or operates any stationary noise source may apply to the Commissioner for a variance or a partial variance from one or more of the provisions of these Regulations. Applications for a variance shall be submitted on forms furnished by the Commissioner and shall supply such information as he/she requires, including, but not limited to:

(i) Information on the nature and location of the facility or process for which such application is made.

(ii) The reason for which the variance is required, including the economic and technical justifications.

(iii) The nature and intensity of noise that will occur during the period of the variance.

(iv) A description of interim noise control measures to be taken by the applicant to minimize noise and the impacts occurring therefrom.

(v) A specific schedule of the best practical noise control measures, if any, which might be taken to bring the source into compliance with those Regulations from which a variance is sought, or a statement of the length of time during which it is estimated that it will be necessary for the variance to continue.

(vi) Any other relevant information the Commissioner may require in order to make a determination regarding the application.

(b) Failure to supply the information required by the form furnished by the Commissioner shall be cause for rejection of the application unless the applicant supplies the needed information within thirty (30) days of the written request by the Commissioner for such information.

(c) No variance shall be approved unless the applicant presents adequate proof to the Commissioner's satisfaction that:

(i) Noise levels occurring during the period of the variance will not constitute a danger to the public health; and

(ii) Compliance with the Regulations would impose an arbitrary or unreasonable hardship upon the applicant without equal or greater benefits to the public.

(d) In making a determination on granting a variance, the Commissioner shall consider:

(i) The character and degree of injury to, or interference with, the health and welfare or the reasonable use of property which is caused or threatened to be caused.

(ii) The social and economic value of the activity for which the variance is sought.

(iii) The ability of the applicant to apply best practical noise control measures, as defined in these Regulations.

(e) Following receipt and review of an application for a variance, the Commissioner shall fix a date, time and location for a hearing on such application.

(f) The Commissioner shall cause the applicant to publish at his/her own expense all notices of hearings and other notices required by law, including, but not limited to, notification of all abutters of record.

(g) Within sixty (60) days of the receipt of the record of the hearings on a variance application, the Commissioner shall issue his/her determination regarding such application. All such decisions shall briefly set forth the reasons for the decision.

(h) The Commissioner may, at his/her discretion, limit the duration of any variance granted under these Regulations. Any person holding a variance and needing an extension of time may apply for a new variance under the provisions of these Regulations. Any such application shall include a certification of compliance with any condition imposed under the previous variance.

(i) The Commissioner may attach to any variance any reasonable conditions he/she deems necessary and desirable, including, but not limited to:

(i) Requirements for the best practical noise control measures to be taken by the owner or operator of the source to minimize noise during the period of the variance.

(ii) Requirements for periodic reports submitted by the applicant relating to noise, to compliance with any other conditions under which the variance was granted or to any other information the Commissioner deems necessary.

(j) The filing of an application for a variance shall operate as a stay of prosecution, except that such stay may be terminated by the Commissioner upon application of any party if the Commissioner finds that protection of the public health so requires.

(k) In any case where a person seeking a variance contends that compliance with any provision of these Regulations is not practical or possible because of the cost involved either in installing noise control equipment or changing or curtailing the operation in any manner, he/she shall make available to the Commissioner such financial records as the Commissioner may require.

(l) A variance may include a compliance schedule and requirements for periodic reporting of increments of achievement of compliance.

(Effective June 15, 1978)

Sec. 22a-69-7.2. Transference

No person who owns, operates or maintains a stationary noise source shall transfer a variance from one site to another site.

(Effective June 15, 1978)

Sec. 22a-69-7.3. Responsibility to comply with applicable regulations

Approval of a variance shall not relieve any person of the responsibility to comply with any other applicable Regulations or other provisions of federal, state or local laws, ordinances or regulations.

(Effective June 15, 1978)

Sec. 22a-69-7.4. Violations and enforcement

(a) No person shall violate or cause the violation of any of these Regulations.

(b) Each day on which a violation occurs or continues after the time for correction of the violation given in the order has elapsed or after thirty (30) days from the date of service of the order, whichever is later, shall be considered a separate violation of these Regulations.

(c) Qualified personnel of the Office of Noise Control shall, with or without complaints, conduct investigations and ascertain whether these Regulations have been complied with. Whenever such personnel determines that any of these Regulations have been violated or there has been a failure to comply therewith, they shall make and serve upon the person(s) responsible for the violation a written order specifying the nature of the violation or failure and affording a reasonable time for its correction or remedy. Prior to the issuance of such order, such personnel shall make a reasonable effort in light of the circumstances to correct a violation or achieve compliance by means of conference, conciliation and persuasion as required by statute. Unless the person(s) against whom an order has been served files a written answer thereto with the Commissioner within thirty (30) days after the date of service of the order and requests a hearing thereon, such order shall become final and effective in accordance with the Connecticut Administrative Procedures Act and the rules, practices, and procedures of the Department of Environmental Protection.

(Effective June 15, 1978)

DELAWARE NOISE REGULATIONS



JUL 8 1982 63 369

DELAWARE STATE SENATE
131ST GENERAL ASSEMBLY

SENATE BILL NO. 600
AS AMENDED BY
SENATE AMENDMENT NO. 1

AN ACT TO AMEND AND REVISE CHAPTER 71, TITLE 7 OF THE DELAWARE CODE RELATING TO NOISE CONTROL AND ABATEMENT.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF DELAWARE (Two-thirds of all members elected to each House thereof concurring therein):

Section 1: Amend Chapter 71, Title 7 of the Delaware Code by striking all of said chapter and inserting in lieu thereof the following:

"Chapter 71. Noise Control and Abatement

Subchapter 1. Non-Vehicle Provisions

§7101. Declaration of Purpose

The Delaware General Assembly finds and determines that the people of this State are entitled to and should be ensured an environment free from noise which unnecessarily degrades the quality of their life; that the levels of noise often reach such a degree as to endanger the health, safety and welfare, jeopardize the value of property and erode the integrity of the environment of the people of this State.

The General Assembly also finds that a substantial body of science and technology exists by which noise may be substantially abated; and that the dangers of excessive noise can be abated by the adoption and enforcement of noise standards embodied in regulations based upon these scientific and technological findings.

The General Assembly also finds that the problem of combating noise involves a high degree of cooperation on the part of various State agencies and departments; this Act makes specific provisions for such inter-agency cooperation.

§7102. Short Title

This Act shall be known and may be cited as the Delaware Noise Control Act.

§7103. Definitions

(a) "Committee" shall mean the Noise Advisory Committee created under the provisions of this Act.

(b) "Farming operations" shall mean any activity which is involved in the production of agriculture, livestock, dairy or poultry products for sale.

(c) "Farm vehicle" shall mean a wheeled device used for transportation in farming operations.

(d) "Manufacturer" shall mean any person employing five or more employees and who is licensed as a manufacturer by the Department of Finance in accordance with the provisions of Chapter 27, Title 30 of the Delaware Code.

(e) "Motor vehicle" shall mean any vehicle defined as a motor vehicle in accordance with the provisions of §101, Chapter 1, Title 21 of the Delaware Code.

(f) "Noise" shall mean any sound which annoys or disturbs humans or which causes or tends to cause an adverse psychological or physiological effect on humans, excluding all aspects of noise regulated by the Federal Occupational Safety and Health Act (OSHA).

(g) "Noise disturbance" means any sound which (1) endangers or injures the safety or health of humans or animals or (2) annoys or disturbs a reasonable person of normal sensitivities, or (3) jeopardizes the value of property and erodes the integrity of the environment.

(h) "Person" shall mean any corporation, company, association, society, firm, partnership, and any joint stock company, as well as individuals; and shall also include the State and all of its political subdivisions; agencies and instrumentalities as well as any department, board or agency of the government of the United States.

(i) "Secretary" shall mean the Secretary of the Department of Natural Resources and Environmental Control.

§7104. Noise and Noise Disturbance Prohibited

(a) No person shall, without first having obtained a variance or a temporary emergency variance from the Department of Natural Resources and Environmental Control, undertake any activity which in any way may cause or contribute to the creation of noise or a noise disturbance.

(b) No person shall, without having first obtained a variance or a temporary emergency variance from the Department of Natural Resources and Environmental Control, construct, install, replace, modify or use any equipment, machinery, motor vehicle, device or other article which in any way may cause or contribute to the creation of noise or a noise disturbance.

§7105. Administration of this Act

The Secretary of the Department of Natural Resources and Environmental Control or his duly authorized designee shall exercise general supervision over the administration of this Chapter and, in conjunction with the various law enforcement agencies of this State, the enforcement of the provisions of this Chapter, and shall have jurisdiction over noise emanating from motor vehicles to the extent of approving standards, codes and regulations proposed by the Secretary of the Department of Public Safety.

The Secretary of the Department of Public Safety shall exercise general supervision over the administration and enforcement of the provisions of this Chapter with regard to noise emanating from motor vehicles.

The provisions of this Subchapter shall not apply to noise caused or created by the work of any public service company incident to the repair or maintenance of its equipment or facilities which may have been damaged or destroyed as the result of any emergency situation including but not limited to acts of God, accidents and explosions.

§7106. Powers and Duties of the Department of Natural Resources and Environmental Control

The Department of Natural Resources and Environmental Control shall have the power and its duty shall be to:

(a) adopt standards, rules and regulations, after public hearing, for the prevention, control, reduction and abatement of noise pollution, applicable throughout the State or to such parts or regions thereof specifically designated in such regulations. The procedure for public hearings shall conform to the procedure described in §6006(2), Chapter 60, Title 7 of the Delaware Code; such rules and regulations, however, shall not purport to exercise jurisdiction over any person or activity not included or affected by the provisions of this Subchapter;

(b) cooperate with all other State departments, divisions and agencies in the formulation and preparation of rules and regulations for the control of noise;

(c) enter into agreements with any other State department in order to affectuate the provisions of this Chapter;

(d) enforce the provisions of this Chapter, and all regulations, codes and rules, promulgated pursuant thereto, except those provisions of this Chapter pertaining to motor vehicles;

(e) in conjunction with the various law enforcement agencies of this State, receive or initiate complaints of noise and institute legal proceedings for the prevention of noise and for the recovery of penalties, in accordance with the provisions of this Chapter;

(f) keep records of violations cited, enforcement procedures initiated and completed in accordance with the provisions of this section;

§7107. Authority of the Department of Natural Resources and Environmental Control

The Department of Natural Resources and Environmental Control shall have the authority to:

(a) conduct and supervise research programs for the purpose of determining the causes, effects and hazards of noise;

(b) conduct and supervise Statewide programs of noise control education, including the preparation and distribution of information relating to noise control;

(c) enter and inspect any building or place, except private residences, for the purpose of investigating an actual or suspected source of noise and ascertaining compliance or non-compliance of any statute, rule or regulation of the Department. Any information relating to secret processes or methods of manufacture or production obtained in the course of such inspection, investigation or determination shall be kept confidential and shall not be admissible in evidence in any court or in any other proceedings except to the extent herein provided. If tests of any type are made for the purpose of determining whether or not a violation has occurred, or for any other purpose in connection with such entry and inspection, a duplicate of the results of the tests shall be furnished promptly to the person suspected of violating the statute, code or regulation;

(d) with the approval of the Governor, cooperate with and receive money from the Federal government, the State government or any county or municipal government or from private sources for the study and control of noise; and

(e) review and approve any plan to construct any highway corridor; the construction or operation of which may in the opinion of the Department cause or contribute to an amount of noise deemed excessive by the Department.

§7108. Enforcement and Penalties: Non-Vehicle Violations

(a) The Department of Natural Resources and Environmental Control shall enforce the provisions of this Chapter and any duly promulgated rules and regulations. All law enforcement agencies of this State, including but not limited to police forces of the Counties and incorporated cities and towns, may also enforce the provisions of this Chapter and any duly promulgated rules and regulations.

(b) Whenever the Department of Natural Resources and Environmental Control or any law enforcement agency within this State has cause to believe based upon observation or a complaint

that any person is violating this Chapter, or any rules or regulations promulgated in accordance with this Chapter, the Department or law enforcement agency is authorized to conduct an investigation in connection therewith.

(c) If upon investigation the Department of Natural Resources and Environmental Control or any law enforcement officer of this State discovers a condition which is in violation of any provision of this Chapter or any rule or regulation promulgated pursuant thereto, the Department or law enforcement officer shall be authorized to order such violation to cease and may take such reasonable steps as are necessary to enforce such an order. The order shall state why a violation exists and shall provide a reasonably specified time within which the violation must cease.

(d) The person responsible for the violation shall make the corrections necessary to comply with the requirements of this Chapter or any rule or regulation promulgated pursuant thereto within the time specified in the order.

(e) Nothing herein shall be deemed to prevent the Department of Natural Resources and Environmental Control or any other law enforcement agency of this State from prosecuting any violation of this Chapter or any rule or regulation promulgated pursuant thereto, notwithstanding that such violation is corrected in accordance with the above order.

(f) In his discretion, the Secretary of the Department of Natural Resources and Environmental Control may endeavor by conciliation to obtain compliance with all requirements of this Chapter or any rule or regulation promulgated pursuant thereto. Conciliation shall be attempted by giving written notice to the responsible party which: (i) specifies the violation (ii) proposes a reasonable time for its correction, and (iii) advises that a cease and desist order may be issued or other action taken unless the violation is corrected.

(g) If a violation is threatening to begin, or is continuing, or if there is a substantial likelihood that it will reoccur, or if the Department of Natural Resources and Environmental Control receives information that a noise disturbance presents an imminent or substantial hazard to public health or to the environment, the Secretary of the Department of Natural Resources may, in addition to or in lieu of any other remedy provided for in this Chapter, seek a temporary restraining order or a preliminary or permanent injunction in the Court of Chancery.

(h) Whoever violates this Chapter or any rule or regulation duly promulgated thereunder, or any variance or temporary emergency variance issued pursuant to §7108 or §7109 of this title or any cease and desist order of the Secretary, shall be punished by a fine of not less than \$25 nor more than \$500 for each violation. Each day of violation shall be considered as a separate violation. Any court of competent jurisdiction shall have jurisdiction of offenses under this subsection.

(i) Any person who wilfully or negligently violates this Chapter or any rule or regulation duly promulgated thereunder, or any variance or temporary emergency variance or any cease and desist order of the Secretary shall be punished by a penalty of not less than \$500 nor more than \$3000 for each day of such violation. The Superior Court shall have jurisdiction of offenses under this subsection.

(j) It shall be a misdemeanor for any person to obstruct, hinder, delay, or interfere with, by force or otherwise, the performance by personnel of the Department of Natural Resources and Environmental Control or any other enforcement personnel of any duty under the provisions of this Chapter, or any rule or regulation or order or permit or decision promulgated or issued thereunder.

S7109. Variance

(a) Any person who owns or operates any stationary noise source may apply to the Secretary of the Department of Natural Resources and Environmental Control for a variance or a partial variance from one or more of the rules or regulations promulgated pursuant to this Chapter. Applicants for a variance shall supply information including, but not limited to:

(i) Information on the nature and location of the facility or process for which such application is made.

(ii) The reason for which the variance is required, including the economic and technical justifications.

(iii) The nature and intensity of noise that will occur during the period of the variance.

(iv) A description of interim noise control measures to be taken by the applicant to minimize noise and the impacts occurring therefrom.

(v) A specific schedule of the best practical noise control measures, if any, which might be taken to bring the source into compliance with those regulations from which a variance is sought, and a statement of the length of time during which it is estimated that it will be necessary for the variance to continue.

(vi) Any other relevant information the Department may require in order to make a determination regarding the application.

(b) Failure to supply the information required shall be cause for rejection of the application unless the applicant supplies the needed information within thirty (30) days of the written request by the Department for such information.

(c) No variance shall be approved unless the Secretary finds that:

(i) Noise levels occurring during the period of the variance will not constitute a danger to the public health; and

(ii) Compliance with this Chapter and any duly promulgated rules or regulations would impose an arbitrary or unreasonable hardship upon the applicant without a commensurate benefit to the public.

(d) In determining whether to grant a variance, the Secretary shall consider:

(i) The character and degree of injury to, or interference with, the health and welfare of people or the reasonable use of property which is caused or threatened to be caused by the noise during the variance period.

(ii) The social and economic value of the activity for which the variance is sought.

(iii) The ability of the applicant to apply best practical noise control measures, as defined in duly promulgated regulations.

(e) Following receipt and review of an application for a variance, and after publishing notice once a week for two weeks in a newspaper of general circulation in the County wherein the variance is proposed, the Department shall, if necessary, fix a date, time and location for a hearing on such application in accordance with 7 Del. C., Chapter 60, §6004. Costs of newspaper advertising are to be paid by the applicant.

(f) Within ten (10) days of the receipt of the record of a hearing on a variance application, or within ten (10) days of receipt of an application on which no hearing is held, the Department shall issue its determination regarding such application and provide a copy to affected parties. All such decisions shall briefly set forth the reasons for the decision.

(g) The Department may, in its discretion, limit the duration of any variance granted. Any person holding a variance and needing an extension of time may apply for a new variance under the provisions of this Chapter and any duly promulgated rules and regulations for a period not to exceed one year. Any such application shall include a certification of compliance with any condition imposed under the previous variance.

(h) The Department may attach to any variance any reasonable conditions it deems necessary and desirable, including, but not limited to:

(i) Requirements for the best practical noise control measures to be taken by the owner or operator of the source to minimize noise during the period of the variance.

(ii) Requirements for periodic reports submitted by the applicant relating to noise, to compliance with any other conditions under which the variance was granted or to any other information the Department deems necessary.

(i) A variance may include a compliance schedule and requirements for periodic reporting of increments of achievement of compliance.

§7110. Temporary Emergency Variance

(a) A temporary emergency variance may be granted by the Department:

(i) If a severe hardship would be caused by the time period involved in obtaining a full variance.

(ii) If the emergency is of an unforeseen nature so as to preclude a full variance because of time limitations.

(iii) If all conditions comply with those required for a full variance. ♦

(iv) For a period not to exceed 60 days, not to be extended more than once.

(b) The granting of any temporary emergency variance shall be published within 5 days of the granting in a newspaper of general circulation once a week for two weeks in the county where the applicant resides.

§7111. Testimony at Hearings

Testimony taken at any hearing shall be under oath and recorded stenographically, but the parties shall not be bound by the strict rules of evidence prevailing in the courts of Law and Equity. True copies of any transcript and of any other record made of or at such hearings shall be furnished to any party thereto upon request, and at his expense. Applicants shall pay for any and all stenographer's fees and, if requested, copies of the transcript.

§7112. Conduct of Hearings

Any administrative or non-judicial hearings required by this Chapter shall be held before the Secretary of the Department of Natural Resources and Environmental Control or before members of the Department designated by the Secretary. The Secretary, or persons designated by him to hear the case, shall have the power to subpoena witnesses and compel their attendance, administer oaths and require the production for examination of any books or papers relating to any matter under investigation in any such hearing. The respondent to a complaint made by it, or to it, pursuant to this Chapter, shall subpoena and compel the attendance of such witnesses as the respondent may designate and require the production for examination of any books or papers relating to any matter under investigation in any such hearing.

**§7113. Appeals of Final Orders: Environmental Appeals
Board; Superior Court**

(a) Any person or persons who jointly or severally are substantially affected and aggrieved by any final order or variance of the Department, or any taxpayer, or any officer, department, board or bureau of the State may appeal that order to the State Environmental Appeals Board and to the Superior Court as provided in 7 Del. C. 56008 and 56009 except that the word "variance" shall be substituted for the word "permit" in 56008(b) and (e).

(b) No appeal shall operate to stay automatically any action of the Secretary, but upon application, and for good cause, the Secretary or the Court of Chancery may stay the action pending disposition of the appeal.

Subchapter II. MOTOR VEHICLES

§7120. Powers and Duties of the Department of Public Safety

(a) The Department of Public Safety, after consideration with the Secretary of the Department of Transportation and upon approval of the Secretary of the Department of Natural Resources and Environmental Control, shall have the power and its duty shall be to:

(i) adopt regulations, after public hearing, establishing the standards, test procedures and instrumentation to be utilized in the control of noise from motor vehicles;

(ii) adopt regulations, after public hearing, necessary for the inspection of motor vehicles, including noise control and abatement equipment to assure compliance with the noise standards promulgated by the Department.

(b) For any public hearings required by the provisions of this Subchapter, the procedure shall conform to the procedure established in §6006, Chapter 60, Title 7 of the Delaware Code.

§7121. Motor Vehicle Noise Inspection

Any motor vehicle which is subject to inspection by the Division of Motor Vehicles or any other duly authorized body shall, as a condition of compliance with said inspection, pass such tests as may be required to demonstrate that the motor vehicle is in compliance with all State and Federal standards and requirements for the control of noise which are applicable to such motor vehicles.

§7122. Motor Vehicle Violations: Enforcement

Any person who operates a motor vehicle or owns a motor vehicle which he permits to be operated upon public highways of this State which generates noise in excess of standards adopted by the Department of Public Safety shall be fined not less than twenty-five dollars (\$25.00) nor more than one thousand dollars (\$1,000.00), which shall be enforced in accordance with the provisions of Chapter 7, Title 21 of the Delaware Code.

§7123. Liberal Interpretation

The powers, duties and functions vested in any State department under the provisions of this Chapter shall not be construed to limit in any manner the powers, duties and functions vested therein or in any person under any other provision of law, or any civil or criminal remedies now or hereafter available to any person related to community noise control.

§7124. Other Ordinances or Remedies

No existing civil or criminal remedy now or hereafter available to any person shall be superseded by this Chapter or any rule or regulation promulgated pursuant thereto.

No ordinances or resolutions of any governing body of a municipality or county or board of health which establish specific standards for the level or duration or community noise equivalent to or more stringent than those provided by this Chapter or any rule or regulation promulgated pursuant thereto shall be superseded. Nothing in this Chapter or in any rule or regulation promulgated pursuant thereto shall preclude the right of any governing body of a municipality or county board of health to adopt ordinances, resolutions or regulations which establish specific standards for the level or duration of community noise equivalent to or more stringent than this Chapter or any rule or regulation promulgated pursuant thereto.

§7125. Exemptions

(a) All farm vehicles are exempted from the provisions of this chapter while engaged in farming operations.

(b) Sirens operated to summon volunteer firemen to alarms and sirens used to summon ambulance crews to service calls are exempted from the provisions of this chapter.

§7126. Validity of Act

If any provision of this Act or the application thereto to any person or circumstances is held invalid, the remainder of the Act and the application of such provision to persons or circumstances other than those to which it is held invalid, shall not be affected thereby."

ILLINOIS NOISE REGULATIONS



Illinois Environmental Protection Agency

Gregory T. Zak
Noise Technical Advisor
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ILLINOIS REVISED STATUTES

1989

STATE BAR ASSOCIATION EDITION

Containing

The General and Permanent Laws of Illinois
Through P.A. 86-1028 of the 86th General Assembly

Convened January 11, 1989

Adjourned July 1, 1989

Reconvened October 4, 1989

Adjourned sine die November 3, 1989

Volume 4

Chapters 110 to 120

Practice

to

Revenue

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(b) "Director" means the Director of the Illinois Department of Public Health;

(c) "Program" means the Environmental Toxicology program as established by this Act;

(d) "Exposure" means contact with a hazardous substance;

(e) "Hazardous Substance" means chemical compounds, elements, or combinations of chemicals which, because of quantity concentration, physical characteristics or toxicological characteristics may pose a substantial present or potential hazard to human health and includes, but is not limited to, any substance defined as a hazardous substance in Section 3 of the "Environmental Protection Act", approved June 29, 1970, as amended;¹

(f) "Initial Assessment" means a review and evaluation of site history and hazardous substances involved, potential for population exposure, the nature of any health related complaints and any known patterns in disease occurrence;

(g) "Comprehensive Health Study" means a detailed analysis which may include: a review of available environmental, morbidity and mortality data; environmental and biological sampling; detailed review of scientific literature; exposure analysis; population surveys; or any other scientific or epidemiologic methods deemed necessary to adequately evaluate the health status of the population at risk and any potential relationship to environmental factors;

(h) "Superfund Site" means any hazardous waste site designated for cleanup on the National Priorities List as mandated by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (P.L. 96-510), as amended;²

(i) "State Remedial Action Priority List" means a list compiled by the Illinois Environmental Protection Agency which identifies sites that appear to present significant risk to the public health, welfare or environment.

¹ Paragraph 1003 of this chapter.

² 42 U.S.C.A. § 9601 et seq.

984. Duties and responsibilities

§ 4. The Department, under the Environmental Toxicology Program, shall have the following duties and responsibilities:

(a) to respond to citizen inquiries and investigate complaints regarding public health concerns which may be related to environmental hazards;

(b) to provide an initial assessment of potential adverse health effects in a community to determine whether a comprehensive health study is warranted in cases where exposure to hazardous substances has occurred;

(c) to conduct a comprehensive health study, if warranted, in cooperation with the Illinois Environmental Protection Agency to assess the full relationship, if any, between observed health problems and possible exposure to hazardous substances in a given community;

(d) to make recommendations for long-term follow-up studies when appropriate;

(e) to provide prompt referrals to appropriate agencies for remedial actions;

(f) to recommend legislation or regulation, in cooperation with the Illinois Environmental Protection Agency to the General Assembly or the Pollution Control Board.

985. Assessment—Superfund or State Remedial Action Priority List Sites—Health study

§ 5. (a) Upon request by the Illinois Environmental Protection Agency, the Department shall conduct an initial assessment for any location designated as a Superfund Site or on the State Remedial Action Priority List. Such assessment shall be initiated within 60 days of the request.

(b) For sites designated as Superfund Sites or sites on the State Remedial Action Priority List on the effective date of this Act, the Department and the Illinois Environmental Protection Agency shall jointly determine which sites warrant initial assessment. If warranted, initial assessment shall be initiated by January 1, 1986.

(c) If, as a result of the initial assessment, the Department determines that a public health problem related to exposure to hazardous substances may exist in a community located near a designated site, the Department shall conduct a comprehensive health study to assess the full relationship, if any, between such threat or potential threat and possible exposure to hazardous substances at the designated site.

986. Public health implications

§ 6. At the request of a unit of local government to which a siting approval application for a new regional pollution control facility for the storage, treatment or disposal of hazardous waste has been made, pursuant to Section 39.2 of the Environment Protection Act,¹ the Department shall evaluate the public health implications of such proposed facility.

Such request shall be made to the Department within 14 days of the filing of the application. The Department shall transmit its evaluation to the unit of local government within 75 days of the request. Such evaluation shall be made available for public inspection and shall be made part of the hearing record. If the Department fails to transmit the evaluation prior to the last required public hearing the unit of local government may consider that evaluation in making its determination only upon its finding that the delay has not resulted in material prejudice to the applicant or the public.

¹ Paragraph 1039.2 of this chapter.

987. Power to contract

§ 7. The Department may enter into contracts or agreements with individuals, corporations, hospitals, universities, not-for-profit corporations, governmental entities or other organizations whereby such individuals, organizations or agencies agree to provide assistance to the Department in carrying out its duties and responsibilities under this Act.

988. Application

§ 8. This Act shall not apply to employee complaints lodged against their employer, which fall under the provisions of the federal Occupational Safety and Health Act.¹

¹ 29 U.S.C.A. § 651 et seq.

ENVIRONMENTAL PROTECTION ACT

AN ACT to protect the environment of the State and to repeal certain Acts therein named. P.A. 76-2429, approved June 29, 1970, eff. July 1, 1970.

TITLE I: GENERAL PROVISIONS

1001. Short title and citation

§ 1. This Act shall be known and may be cited as the "Environmental Protection Act".

1002. Legislative declaration

§ 2. (a) The General Assembly finds:

(i) that environmental damage seriously endangers the public health and welfare, as more specifically described in later sections of this Act;

(ii) that because environmental damage does not respect political boundaries, it is necessary to establish a unified state-wide program for environmental protection and to cooperate fully with other States and with the United States in protecting the environment;

(iii) that air, water, and other resource pollution, public water supply, solid waste disposal, noise, and other environmental problems are closely interrelated and must be dealt with as a unified whole in order to safeguard the environment;

(iv) that it is the obligation of the State Government to manage its own activities so as to minimize environmental damage; to encourage and assist local governments to adopt and implement environmental-protection programs consistent with this Act; to promote the development of technology for environmental protection and conservation of natural resources; and in appropriate cases to afford financial assistance in preventing environmental damage;

(v) that in order to alleviate the burden on enforcement agencies, to assure that all interests are given a full hearing, and to increase public participation in the task of protecting the environment, private as well as governmental remedies must be provided;

(vi) that despite the existing laws and regulations concerning environmental damage there exist continuing destruction and damage to the environment and harm to the public health, safety and welfare of the people of this State, and that among the most significant sources of this destruction, damage, and harm are the improper and unsafe transportation, treatment, storage, disposal, and dumping of hazardous wastes;

(vii) that it is necessary to supplement and strengthen existing criminal sanctions regarding environmental damage, by enacting specific penalties for injury to public health and welfare and the environment.

(b) It is the purpose of this Act, as more specifically described in later sections, to establish a unified, state-wide program supplemented by private remedies, to restore, protect and enhance the quality of the environment, and to assure that adverse effects upon the environment are fully considered and borne by those who cause them.

(c) The terms and provisions of this Act shall be liberally construed so as to effectuate the purposes of this Act as set forth in subsection (b) of this Section, but to the extent that this Act prescribes criminal penalties, it shall be construed in accordance with the "Criminal Code of 1961", as amended.¹

Amended by P.A. 83-1101, § 1, eff. Jan. 5, 1984.

¹ Chapter 38, ¶ 1-1 et seq.

1003. Definitions

§ 3. For the purposes of this Act, the words and terms defined in the Sections which follow this Section and

precede Section 4¹ shall have the meaning therein given, unless the context otherwise clearly requires.

Amended by P.A. 84-1438, Art. II, § 36, eff. Dec. 22, 1986.

¹ Paragraph 1004 of this chapter.

Article II of P.A. 84-1438 was the Second 84th General Assembly Combining Revisory Act which resolved multiple actions and made technical corrections in Acts of the 84th General Assembly.

1003.01. Agency

§ 3.01. "Agency" is the Environmental Protection Agency established by this Act.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.02. Air pollution

§ 3.02. "Air pollution" is the presence in the atmosphere of one or more contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.03. Air pollution control equipment

§ 3.03. "Air pollution control equipment" means any equipment or facility of a type intended to eliminate, prevent, reduce or control the emission of specified air contaminants to the atmosphere. Air pollution control equipment includes, but is not limited to, landfill gas recovery facilities.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.04. Board

§ 3.04. "Board" is the Pollution Control Board established by this Act.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.05. Community water supply—Non-community water supply

§ 3.05. "Community water supply" means a public water supply which serves or is intended to serve at least 15 service connections used by residents or regularly serves at least 25 residents.

"Non-community water supply" means a public water supply that is not a community water supply. The requirements of this Act shall not apply to non-community water supplies.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.06. Contaminant

§ 3.06. "Contaminant" is any solid, liquid, or gaseous matter, any odor, or any form of energy, from whatever source.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.07. Department

§ 3.07. "Department" is the Illinois Department of Energy and Natural Resources.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.08. Disposal

§ 3.08. "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any waste or

1003.19. Landfill gas recovery facility

§ 3.19. "Landfill gas recovery facility" means any facility which recovers and processes landfill gas from a sanitary landfill or waste disposal site.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.20. Landscape waste

§ 3.20. "Landscape waste" means all accumulations of grass or shrubbery cuttings, leaves, tree limbs and other materials accumulated as the result of the care of lawns, shrubbery, vines and trees.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.21. Municipal waste

§ 3.21. "Municipal waste" means garbage, general household and commercial waste, landscape waste and construction or demolition debris.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.22. Municipality

§ 3.22. "Municipality" means any city, village or incorporated town.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.23. Open burning

§ 3.23. "Open burning" is the combustion of any matter in the open or in an open dump.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.24. Open dumping

§ 3.24. "Open dumping" means the consolidation of refuse from one or more sources at a disposal site that does not fulfill the requirements of a sanitary landfill.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.25. Organized amateur or professional sporting activity

§ 3.25. "Organized amateur or professional sporting activity" means an activity or event carried out at a facility by persons who engaged in that activity as a business or for education, charity or entertainment for the general public, including all necessary actions and activities associated with such an activity. This definition includes, but is not limited to, skeet, trap or shooting sports clubs in existence prior to January 1, 1975, organized motor sports, and sporting events organized or controlled by school districts, units of local government, state agencies, colleges, universities or professional sports clubs offering exhibitions to the public.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.26. Person

§ 3.26. "Person" is any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, political subdivision, state agency, or any other legal entity, or their legal representative, agent or assigns.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.27. Pollution control waste

§ 3.27. "Pollution control waste" means any liquid, solid, semi-solid or gaseous waste generated as a direct or

indirect result of the removal of contaminants from the air, water or land, and which pose a present or potential threat to human health or to the environment or with inherent properties which make the disposal of such waste in a landfill difficult to manage by normal means. "Pollution Control Waste" includes but is not limited to water and wastewater treatment plant sludges, baghouse dusts, landfill waste, scrubber sludges and chemical spill cleanings.

Amended by P.A. 85-1428, § 1, eff. Jan. 5, 1989.

1003.28. Public water supply

§ 3.28. "Public water supply" means all mains, pipes and structures through which water is obtained and distributed to the public, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use and which serve at least 15 service connections or which regularly serve at least 25 persons at least 60 days per year. A public water supply is either a "community water supply" or a "non-community water supply".

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.29. RCRA permit

§ 3.29. "RCRA permit" means a permit issued by the Agency pursuant to authorization received by the Agency from the United States Environmental Protection Agency under Subtitle C of the Resource Conservation and Recovery Act of 1976, (P.L. 94-580) (RCRA)¹ and which meets the requirements of Section 3005 of RCRA and of this Act.²

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

¹ 42 U.S.C.A. § 6921 et seq.

² 42 U.S.C.A. § 6925.

1003.30. Recycling, reclamation or reuse

§ 3.30. "Recycling, reclamation or reuse" when used in connection with hazardous waste means a method, technique, or process designed to remove any contaminant from waste so as to render such waste reusable.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.31. Refuse

§ 3.31. "Refuse" means waste.

Added by P.A. 84-1308, Art. III, § 54, eff. Aug. 25, 1986.

1003.32. Regional pollution control facility

§ 3.32. (a) "Regional pollution control facility" is any waste storage site, sanitary landfill, waste disposal site, waste transfer station, waste treatment facility or waste incinerator that accepts waste from or that serves an area that exceeds or extends over the boundaries of any local general purpose unit of government. This includes sewers, sewage treatment plants, and any other facilities owned or operated by sanitary districts organized under "An Act to create sanitary districts and to remove obstructions in the Des Plaines and Illinois rivers", approved May 29, 1889, as now or hereafter amended.¹

The following are not regional pollution control facilities:

cling symbol and the following statements: "DO NOT put motor vehicle batteries in the trash."; "Recycle your used batteries."; and "State law requires us to accept motor vehicle batteries for recycling, in exchange for new batteries purchased."

(b) Any person selling lead-acid batteries at retail in this State may either charge a recycling fee on each new lead-acid battery sold for which the customer does not return a used battery to the retailer, or provide a recycling credit to each customer who returns a used battery for recycling at the time of purchasing a new one.

(c) Beginning September 1, 1990, no lead-acid battery retailer may dispose of a used lead-acid battery except by delivering it (1) to a battery wholesaler or its agent, (2) to a battery manufacturer, (3) to a collection or recycling facility, or (4) to a secondary lead smelter permitted by either a state or federal environmental agency.

(d) Any person selling lead-acid batteries at wholesale or offering lead-acid batteries for sale at wholesale shall accept for recycling used lead-acid batteries from customers, at the point of transfer, in a quantity equal to the number of new batteries purchased. Such used batteries shall be disposed of as provided in subsection (c).

(e) A person who accepts used lead-acid batteries for recycling pursuant to subsection (a) or (d) shall not allow such batteries to accumulate for periods of more than 90 days.

(f) Beginning September 1, 1990, no person may knowingly cause or allow:

(1) the placing of a lead-acid battery into any container intended for collection and disposal at a municipal waste sanitary landfill; or

(2) the disposal of any lead-acid battery in any municipal waste sanitary landfill or incinerator.

(g) The Department shall identify and assist in developing alternative processing and recycling options for used batteries.

(h) For the purpose of this Section:

"Lead-acid battery" means a battery containing lead and sulfuric acid that has a nominal voltage of at least 6 volts and is intended for use in motor vehicles.

"Motor vehicle" includes automobiles, vans, trucks, tractors, motorcycles and motorboats.

(i) The Department shall study the problems associated with household batteries that are processed or disposed of as part of mixed solid waste, and shall develop and implement a pilot project to collect and recycle used household batteries. The Department shall report its findings to the Governor and the General Assembly, together with any recommendations for legislation, by November 1, 1991.

(j) Knowing violation of this Section shall be a petty offense punishable by a fine of \$100.

Added by P.A. 86-723, § 1, eff. Jan. 1, 1990.

Other §§ 1022.23 were renumbered §§ 1022.24 and 1022.25.

1022.24. Cleaning mud, gravel, waste, etc., from vehicles leaving landfills

§ 22.24. (a) Beginning January 1, 1990, no person may operate any landfill in any county with a population over 275,000, as determined by the latest federal decennial census, unless facilities are provided at such landfills which are appropriate for cleaning mud, gravel, waste and

other material from the site off of the wheels and undercarriages of trucks and other vehicles exiting the site.

(b) Beginning January 1, 1990, no person may drive any truck or trailer off the site of a landfill in any county with a population over 275,000, as determined by the latest federal decennial census, without first cleaning any mud, gravel, waste or other material from the site off of the wheels and undercarriage of the vehicle.

Formerly § 22.23. Added by P.A. 86-772, § 1, eff. Jan. 1, 1990. Renumbered § 22.24 and amended by P.A. 86-1028, Art. II, § 2-61, eff. Feb. 5, 1990.

P.A. 86-1028, Art. II, resolved multiple actions in the 86th General Assembly and made certain technical corrections in P.A. 86-1 through P.A. 86-1009.

1022.25. Solid waste technicians—Training and certification—Supervision of sanitary landfill

Paragraph effective July 1, 1990.

§ 22.25. (a) The Agency shall annually conduct a course of training on the practical aspects of the design, operation and maintenance of solid waste disposal facilities, and shall designate as certified solid waste technicians all persons who successfully complete such training and meet such other qualifications as the Agency may require.

(b) Beginning January 1, 1991, the operation of each sanitary landfill accepting municipal waste in the State shall be subject to the supervision of a certified solid waste technician, and operation of such a sanitary landfill without the supervision of a certified solid waste technician shall be a violation of this Act.

(c) Nothing in this Section shall be construed as limiting the general authority of the Board to promulgate regulations pursuant to Title VII of this Act.¹

Formerly § 22.23. Added by P.A. 86-961, § 1, eff. July 1, 1990. Renumbered § 22.25 and amended by P.A. 86-1028, Art. II, § 2-61, eff. Feb. 5, 1990.

¹ Paragraph 1026 et seq. of this chapter.

P.A. 86-1028, Art. II, resolved multiple actions in the 86th General Assembly and made certain technical corrections in P.A. 86-1 through P.A. 86-1009.

TITLE VI: NOISE

1023. Legislative declaration

§ 23. The General Assembly finds that excessive noise endangers physical and emotional health and well-being, interferes with legitimate business and recreational activities, increases construction costs, depresses property values, offends the senses, creates public nuisances, and in other respects reduces the quality of our environment.

It is the purpose of this Title to prevent noise which creates a public nuisance.

1024. Acts prohibited

§ 24. No person shall emit beyond the boundaries of his property any noise that unreasonably interferes with the enjoyment of life or with any lawful business or activity, so as to violate any regulation or standard adopted by the Board under this Act.

1025. Regulations

§ 25. The Board, pursuant to the procedures prescribed in Title VII of this Act,¹ may adopt regulations prescribing limitations on noise emissions beyond the boundaries of the property of any person and prescribing requirements and standards for equipment and procedures for monitoring noise and the collection, reporting and retention of data resulting from such monitoring.

The Board shall, by regulations under this Section, categorize the types and sources of noise emissions that unreasonably interfere with the enjoyment of life, or with any lawful business, or activity, and shall prescribe for each such category the maximum permissible limits on such noise emissions. The Board shall secure the co-operation of the Illinois Department of Energy and Natural Resources in determining the categories of noise emission and the technological and economic feasibility of such noise level limits.

In establishing such limits, the Board, in addition to considering those factors set forth in Section 27 of this Act,² shall consider the adverse ecological effects on and interference with the enjoyment of natural, scenic, wilderness or other outdoor recreational areas, parks, and forests occasioned by noise emissions from automotive, mechanical, and other sources and may establish lower permissible noise levels applicable to sources in such outdoor recreational uses.

No Board standards for monitoring noise or regulations prescribing limitations on noise emissions shall apply to any organized amateur or professional sporting activity except as otherwise provided in this Section. Baseball, football or soccer sporting events played during nighttime hours, by professional athletes, in a city with more than 1,000,000 inhabitants, in a stadium at which such nighttime events were not played prior to July 1, 1982, shall be subject to nighttime noise emission regulations promulgated by the Illinois Pollution Control Board; however, the following events shall not be subject to such regulations:

(1) baseball World Series games, league championship series games and other playoff games played after the conclusion of the regular season, and baseball All Star games; and

(2) sporting events or other events held in a stadium which replaces a stadium not subject to such regulations and constructed within 1500 yards of the original stadium by the Illinois Sports Facilities Authority.

For purposes of this Section and Section 24,³ "beyond the boundaries of his property" or "beyond the boundaries of the property of any person" includes personal property as well as real property.

Amended by P.A. 85-1209, Art. II, § 2-71, eff. Aug. 30, 1988.

¹ Paragraph 1026 et seq. of this chapter.

² Paragraph 1027 of this chapter.

³ Paragraph 1024 of this chapter.

Article II of P.A. 85-1209, the First 85th General Assembly Combining Revisory Act, resolved multiple actions in the 85th General Assembly and made certain technical corrections through P.A. 85-1014.

TITLE VI-A: ATOMIC RADIATION

1025a. § 25a. Repealed by P.A. 81-1516, § 15, eff. Dec. 3, 1986.

1025b. Nuclear plant construction—Environmental feasibility report—Regulations

§ 25b. The Pollution Control Board shall promulgate regulations requiring any person, corporation or public

authority intending to construct a nuclear steam-generating facility or a nuclear fuel reprocessing plant to file with the Department of Nuclear Safety an environmental feasibility report which incorporates the data provided in the preliminary safety analysis required to be filed with the United States Nuclear Regulatory Commission. The Board shall have the power to adopt standards to protect the health, safety and welfare of the citizens of Illinois from the hazards of radiation to the extent that such powers are not preempted under the federal constitution. Added by P.A. 81-1516, Art. I, § 14, eff. Dec. 3, 1980.

1025a-1. Decommissioning plan

§ 25a-1. At least 60 days before beginning the decommissioning of any nuclear power plant located in this State, the owner or operator of the plant shall file, for information purposes only, a copy of the decommissioning plan for the plant with the Agency and a copy with the Department of Nuclear Safety.

Added by P.A. 85-1400, § 1, eff. Sept. 12, 1988. Amended by P.A. 86-901, § 5, eff. Sept. 11, 1989.

TITLE VI-B: TOXIC CHEMICAL REPORTING

Title VI-B, consisting of paragraphs 1025b-1 to 1025b-5, was added by P.A. 85-927, § 2, eff. July 1, 1988.

1025b-1. Legislative findings and purpose

§ 25b-1. (a) The General Assembly finds:

(1) That many industrial facilities in the State may be emitting or discharging toxic chemicals into the environment on an ongoing basis, and that such releases may pose a chronic threat to public health and the environment.

(2) That members of the general public have a right to know about the toxic chemical emissions and discharges in their communities so that they can determine the implications on public health from exposure to such chemicals and participate in public policy decision-making.

(3) That the federal Emergency Planning and Community Right-to-Know Act of 1986¹ that has been recently enacted will require certain industries to provide information to the State on the types and quantities of toxic chemicals released into the air, ground and water.

(b) It is the purpose of this Title to provide for the coordinated State implementation of the new federal program which requires the disclosure of information about routine releases of toxic chemicals into the environment, and to provide an orderly procedure whereby the public may gain access to this information.

Added by P.A. 85-927, § 2, eff. July 1, 1988.

¹ 42 U.S.C.A. § 11001 et seq.

1025b-2. Toxic chemical release forms

§ 25b-2. (a) Facilities which are required to file toxic chemical release forms with the State pursuant to Section 313 of the federal Emergency Planning and Community Right-to-Know Act of 1986¹ shall file such forms with the Illinois Environmental Protection Agency.

(b) The Agency shall make toxic chemical release forms available to the public for inspection and copying during regular business hours and, upon written request, shall

body of the municipality. At such hearing the rules prescribed in Sections 32 and 33(a) of this Act³ shall apply, and the burden of proof shall be on the petitioner; however, no new or additional evidence in support of or in opposition to any finding, order, determination or decision of the appropriate county board or governing body of the municipality shall be heard by the Board. In making its orders and determinations under this Section, the Board shall include in its consideration the written decision and reasons for the decision of the county board or the governing body of the municipality, the transcribed record of the hearing held pursuant to subsection (d) of Section 39.2, and the fundamental fairness of the procedures used by the county board or the governing body of the municipality in reaching its decision. The Board shall transmit a copy of its decision to the office of the county board or governing body of the municipality where it shall be available for public inspection and copied upon payment of the actual cost of reproduction. If there is no final action by the Board within 120 days, petitioner may deem the site location approved; provided, however that that period of 120 days shall not run for any period of time, not to exceed 30 days, during which the Board is without sufficient membership to constitute the quorum required by subsection (a) of Section 5 of this Act,⁴ and provided further, that such 120 day period shall not be stayed for lack of quorum beyond 30 days regardless of whether the lack of quorum exists at the beginning of such 120 day period or occurs during the running of such 120 day period.

(b) If the county board or the governing body of the municipality as determined by paragraph (c) of Section 39 of this Act, grants approval under Section 39.2 of this Act, a third party other than the applicant who participated in the public hearing conducted by the county board or governing body of the municipality may petition the Board within 35 days for a hearing to contest the approval of the county board or the governing body of the municipality. Unless the Board determines that such petition is duplicative or frivolous, or that the petitioner is so located as to not be affected by the proposed facility, the Board shall hear the petition in accordance with the terms of subsection (a) of this Section and its procedural rules governing denial appeals, such hearing to be based exclusively on the record before county board or the governing body of the municipality. The burden of proof shall be on the petitioner. The county board or the governing body of the municipality and the applicant shall be named as co-respondents.

The Board shall transmit a copy of its decision to the office of the county board or governing body of the municipality where it shall be available for public inspection and may be copied upon payment of the actual cost of reproduction.

(c) Any person who files a petition to contest a decision of the county board or governing body of the municipality shall pay a filing fee.

Amended by P.A. 85-1331, § 1, eff. Jan. 1, 1989.

¹ Paragraph 1039 of this chapter.

² Paragraph 1039.2 of this chapter.

³ Paragraphs 1032 and 1033 of this chapter.

⁴ Paragraph 1005 of this chapter.

P.A. 84-832, the 1985 Revisory Act, resolved multiple actions in the 83rd General Assembly.

TITLE XI: JUDICIAL REVIEW

1041. Review under Administrative Review Law

§ 41. (a) Any party to a Board hearing, any person who filed a complaint on which a hearing was denied, any person who has been denied a variance or permit under this Act, and any party adversely affected by a final order or determination of the Board may obtain judicial review, by filing a petition for review within thirty-five days after entry of the order or other final action complained of, pursuant to the provisions of the Administrative Review Law, as amended and the rules adopted pursuant thereto,¹ except that review shall be afforded directly in the Appellate Court for the District in which the cause of action arose and not in the Circuit Court. Review of any rule or regulation promulgated by the Board shall not be limited by this section but may also be had as provided in Section 29 of this Act.²

(b) Any final order of the Board under this Act shall be based solely on the evidence in the record of the particular proceeding involved, and any such final order for permit appeals, enforcement actions and variance proceedings, shall be invalid if it is against the manifest weight of the evidence. Notwithstanding this subsection, the Board may include such conditions in granting a variance and may adopt such rules and regulations as the policies of this Act may require. If an objection is made to a variance condition, the Board shall reconsider the condition within not more than 75 days from the date of the objection.

(c) No challenge to the validity of a Board order shall be made in any enforcement proceeding under Title XII of this Act³ as to any issue that could have been raised in a timely petition for review under this Section.

(d) If there is no final action by the Board within 120 days on a request for a variance which is subject to subsection (c) of Section 38⁴ or a permit appeal which is subject to paragraph (a)(3) of Section 40⁵ the petitioner shall be entitled to an Appellate Court order pursuant to this subsection. If a hearing is required under this Act and was not held by the Board, the Appellate Court shall order the Board to conduct such a hearing, and to make a decision within 90 days from the date of the order. If a hearing was held by the Board, or if a hearing is not required under this Act and was not held by the Board, the Appellate Court shall order the Board to make a decision within 90 days from the date of the order.

The Appellate Court shall retain jurisdiction during the pendency of any further action conducted by the Board pursuant to an order by the Appellate Court. The Appellate Court shall have jurisdiction to review all issues of law and fact presented upon appeal.

Amended by P.A. 88-431, § 1, eff. Sept. 17, 1988.

¹ Chapter 110, § 3-101 et seq.

² Paragraph 1029 of this chapter.

³ Paragraph 1042 et seq. of this chapter.

⁴ Paragraph 1038 of this chapter.

⁵ Paragraph 1040 of this chapter.

TITLE XII: PENALTIES

1042. Violation of Act, regulation, permit, determination or order—Civil penalties—Liability for value of fish or aquatic life destroyed—Civil actions—Actions by State's Attorney or Attorney General

Text of paragraph as amended by P.A. 86-242, § 1.

§ 42. (a) Except as provided in this Section, any person that violates any provisions of this Act or any regulation adopted by the Board, or any permit or term or condition thereof, or that violates any determination or order of the Board pursuant to this Act, shall be liable to a civil penalty of not to exceed \$10,000 for said violation and an additional civil penalty of not to exceed \$1,000 for each day during which violation continues; such penalties may, upon order of the Board or a court of competent jurisdiction, be made payable to the Environmental Protection Trust Fund, to be used in accordance with the provisions of "An Act creating the Environmental Protection Trust Fund", approved September 22, 1979, as amended.¹

(b) Notwithstanding the provisions of subsection (a) of this Section:

(1) Any person that violates Section 12(f) of this Act² or any NPDES permit or term or condition thereof, or any filing requirement, regulation or order relating to the NPDES permit program shall be liable to a civil penalty of not to exceed \$10,000 per day of violation;

(2) Any person that violates Section 12(g) of this Act or any UIC permit or term or condition thereof, or any filing requirement, regulation or order relating to the State UIC program for all wells, except Class II wells as defined by the Board under this Act, shall be liable to a civil penalty not to exceed \$2,500 per day of violation; provided, however, that any person who commits such violations relating to the State UIC program for Class II wells, as defined by the Board under this Act, shall be liable to a civil penalty of not to exceed \$10,000 for said violation and an additional civil penalty of not to exceed \$1,000 for each day during which the violation continues;

(3) Any person that violates Sections 21(f), 21(g), 21(h) or 21(i) of this Act³ or any RCRA permit or term or condition thereof, or any filing requirement, regulation or order relating to the State RCRA program shall be liable to a civil penalty of not to exceed \$25,000 per day of violation.

(4) In an administrative citation action under Section 31.1 of this Act,⁴ any person found to have violated any provision of subsection (p) or (q) of Section 21 of this Act shall pay a civil penalty of \$500 for each violation of each such provision, plus any hearing costs incurred by the Board and the Agency. Such penalties shall be made payable to the Environmental Protection Trust Fund, to be used in accordance with the provisions of "An Act creating the Environmental Protection Trust Fund", approved September 22, 1979, as amended; except that if a unit of local government issued the administrative citation, 50% of the civil penalty shall be payable to the unit of local government.

(c) Any person that violates this Act, or an order or other determination of the Board under this Act and causes the death of fish or aquatic life shall, in addition to the other penalties provided by this Act, be liable to pay to the State an additional sum for the reasonable value of the fish or aquatic life destroyed. Any money so recovered shall be placed in the Wildlife and Fish Fund in the State Treasury;

(d) The penalties provided for in this Section may be recovered in a civil action.

(e) The State's Attorney of the county in which the violation occurred, or the Attorney General, may, at the request of the Agency or on his own motion, institute a

civil action for an injunction to restrain violations of this Act.

(f) The State's Attorney of the county in which the violation occurred, or the Attorney General, shall bring such actions in the name of the people of the State of Illinois. Without limiting any other authority which may exist for the awarding of attorney's fees and costs, the Board or a court of competent jurisdiction may award costs and reasonable attorney's fees, including the reasonable costs of expert witnesses and consultants, to the State's Attorney or the Attorney General in a case where he has prevailed against a person who has committed a willful, knowing or repeated violation of the Act.

Any funds collected under this subsection (f) in which the Attorney General has prevailed shall be deposited in the Hazardous Waste Fund created in Section 22.2 of this Act.⁵ Any funds collected under this subsection (f) in which a State's Attorney has prevailed shall be retained by the county in which he serves.

(g) All final orders imposing civil penalties pursuant to this Section shall prescribe the time for payment of such penalties. If any such penalty is not paid within the time prescribed, interest on such penalty at the rate set forth in subsection (a) of Section 1003 of the Illinois Income Tax Act, as now or hereafter amended,⁶ shall be paid for the period from the date payment is due until the date payment is received. However, if the time for payment is stayed during the pendency of an appeal, interest shall not accrue during such stay.

Amended by P.A. 85-1346, § 2, eff. Aug. 31, 1988; P.A. 86-242, § 1, eff. Jan. 1, 1990.

¹ Paragraph 1061 et seq. of this chapter.

² Paragraph 1012 of this chapter.

³ Paragraph 1021 of this chapter.

⁴ Paragraph 1031.1 of this chapter.

⁵ Paragraph 1022.2 of this chapter.

⁶ Chapter 120, ¶ 10-1003.

For text of paragraph as amended by P.A. 86-242, § 1; P.A. 86-1014, § 1, eff. July 1, 1990, see ¶ 1042, post.

For final legislative action, see note following ¶ 1042, post.

1042. Violation of Act, regulation, permit, determination or order—Civil penalties—Liability for value of fish or aquatic life destroyed—Civil actions—Actions by State's Attorney or Attorney General

Text of paragraph as amended by P.A. 86-242, § 1; P.A. 86-1014, § 1, eff. July 1, 1990.

§ 42. (a) Except as provided in this Section, any person that violates any provisions of this Act or any regulation adopted by the Board, or any permit or term or condition thereof, or that violates any determination or order of the Board pursuant to this Act, shall be liable to a civil penalty of not to exceed \$50,000 for said violation and an additional civil penalty of not to exceed \$10,000 for each day during which violation continues; such penalties may, upon order of the Board or a court of competent jurisdiction, be made payable to the Environmental Protection Trust Fund, to be used in accordance with the provisions of "An Act creating the Environmental Protection Trust Fund", approved September 22, 1979, as amended.¹

(c) If an industrial user of a publicly owned or publicly regulated sewage works is not in compliance with a system of user charges required under State law or local ordinance or regulations or as a term or condition of any NPDES permit issued under this Act to the sewage works into which the user is discharging contaminants, the system of charges may be enforced directly against the industrial user—

(i) by the public body owning or regulating such sewage works, pursuant to State law or local ordinance; or

(ii) under the provisions of Title VIII of this Act;¹ or

(iii) the State's Attorney of the county in which the violation occurred, or the Attorney General, at the request of the Agency or on his own motion, may proceed in a court of competent jurisdiction to secure such relief.

Amended P.A. 78-862, § 1, eff. Sept. 14, 1973.

¹ Paragraph 1030 et seq. of this chapter.

1044. Violations of Act, regulations or permits—Offenses—Punishment—Venue—Procedure

§ 44. (a) Except as otherwise provided in this Section, it shall be a Class A misdemeanor to violate this Act or regulations thereunder, or any permit or term or condition thereof, or knowingly to submit any false information under this Act or regulations adopted thereunder, or under any permit or term or condition thereof. It shall be the duty of all State and local law-enforcement officers to enforce such Act and regulations, and all such officers shall have authority to issue citations for such violations.

(b) Calculated Criminal Disposal of Hazardous Waste.

(1) A person commits the offense of Calculated Criminal Disposal of Hazardous Waste when, without lawful justification, he knowingly disposes of hazardous waste while knowing that he thereby places another person in danger of great bodily harm or creates an immediate or long-term danger to the public health or the environment.

(2) Calculated Criminal Disposal of Hazardous Waste is a Class 2 felony. In addition to any other penalties prescribed by law, a person convicted of the offense of Calculated Criminal Disposal of Hazardous Waste is subject to a fine not to exceed \$500,000 for each day of such offense.

(c) Criminal Disposal of Hazardous Waste.

(1) A person commits the offense of Criminal Disposal of Hazardous Waste when, without lawful justification, he knowingly disposes of hazardous waste.

(2) Criminal Disposal of Hazardous Waste is a Class 3 felony. In addition to any other penalties prescribed by law, a person convicted of the offense of Criminal Disposal of Hazardous Waste is subject to a fine not to exceed \$250,000 for each day of such offense.

(d) Unauthorized Use of Hazardous Waste.

(1) A person commits the offense of Unauthorized Use of Hazardous Waste when he, being required to have a permit or license under this Act or any other law regulating the treatment, transportation, or storage of hazardous waste, knowingly:

(A) treats, transports, or stores any hazardous waste without such permit or license; or

(B) treats, transports, or stores any hazardous waste in violation of the terms and conditions of such permit or license; or

(C) transports any hazardous waste to a facility which does not have a permit or license required under this Act; or

(D) transports any hazardous waste without having on his person such permit or license.

(2) A person who is convicted of a violation of subdivision (1)(A), (1)(B) or (1)(C) of this subsection is guilty of a Class 4 felony. A person who is convicted of a violation of subdivision (1)(D) is guilty of a Class A misdemeanor. In addition to any other penalties prescribed by law, a person convicted of violating subdivision (1)(A), (1)(B) or (1)(C) is subject to a fine not to exceed \$100,000 for each day of such violation, and a person who is convicted of violating subdivision (1)(D) is subject to a fine not to exceed \$1,000.

(e) Unlawful Delivery of Hazardous Waste.

(1) Except as authorized by this Act or the federal Resource Conservation and Recovery Act,¹ and the regulations promulgated thereunder, it is unlawful for any person to knowingly deliver hazardous waste.

(2) Unlawful Delivery of Hazardous Waste is a Class 3 felony. In addition to any other penalties prescribed by law, a person convicted of the offense of Unlawful Delivery of Hazardous Waste is subject to a fine not to exceed \$250,000 for each such violation.

(3) For purposes of this Section, "deliver" or "delivery" means the actual, constructive, or attempted transfer of possession of hazardous waste, with or without consideration, whether or not there is an agency relationship.

(f) Reckless Disposal of Hazardous Waste.

(1) A person commits Reckless Disposal of Hazardous Waste if he disposes of hazardous waste, and his acts which cause the hazardous waste to be disposed of, whether or not those acts are undertaken pursuant to or under color of any permit or license, are performed with a conscious disregard of a substantial and justifiable risk that such disposing of hazardous waste is a gross deviation from the standard of care which a reasonable person would exercise in the situation.

(2) Reckless Disposal of Hazardous Waste is a Class 4 felony. In addition to any other penalties prescribed by law, a person convicted of the offense of Reckless Disposal of Hazardous Waste is subject to a fine not to exceed \$50,000 for each day of such offense.

(g) Concealment of Criminal Disposal of Hazardous Waste.

(1) A person commits the offense of Concealment of Criminal Disposal of Hazardous Waste when he conceals, without lawful justification, the disposal of hazardous waste with the knowledge that such hazardous waste has been disposed of in violation of this Act.

(2) Concealment of Criminal Disposal of a Hazardous Waste is a Class 4 felony. In addition to any other penalties prescribed by law, a person convicted of the offense of Concealment of Criminal Disposal of Hazardous Waste is subject to a fine not to exceed \$50,000 for each day of such offense.

(h) Violations—False Statements.

(1) Any person who knowingly makes a false material statement in an application for a permit or license required by this Act to treat, transport, store, or dispose of hazardous waste commits the offense of Perjury and shall be subject to the penalties set forth in Section 32-2 of the Criminal Code of 1961, as now or hereafter amended.¹

(2) No conveyance is subject to forfeiture under this Section by reason of any covered violation which the owner proves to have been committed without his knowledge or consent.

(3) A forfeiture of a conveyance encumbered by a bona fide security interest is subject to the interest of the secured party if he neither had knowledge of nor consented to the covered violation.

(c) Except as provided in subsection (d), all property subject to forfeiture under this Section shall be seized pursuant to the order of a circuit court.

(d) Property subject to forfeiture under this Section may be seized by the Director or any peace officer without process:

(1) if the seizure is incident to an inspection under an administrative inspection warrant, or incident to the execution of a criminal search or arrest warrant;

(2) if the property subject to seizure has been the subject of a prior judgment in favor of the State in a criminal proceeding, or in an injunction or forfeiture proceeding based upon this Act; or

(3) if there is probable cause to believe that the property is directly or indirectly dangerous to health or safety.

(e) Property taken or detained under this Section shall not be subject to forcible entry and detainer or replevin, but is deemed to be in the custody of the Director subject only to the order and judgments of the circuit court having jurisdiction over the forfeiture proceedings. When property is seized under this Act, the Director may:

(1) place the property under seal;

(2) secure the property or remove the property to a place designated by him; or

(3) require the sheriff of the county in which the seizure occurs to take custody of the property and secure or remove it to an appropriate location for disposition in accordance with law.

(f) All amounts forfeited under item (1) of subsection (a) shall be apportioned in the following manner:

(1) 40% shall be deposited in the Hazardous Waste Fund created in Section 22.2;¹

(2) 30% shall be paid to the office of the Attorney General or the State's Attorney of the county in which the violation occurred, whichever brought and prosecuted the action; and

(3) 30% shall be paid to the law enforcement agency which investigated the violation.

Any funds received under this subsection (f) shall be used solely for the enforcement of the environmental protection laws of this State.

(g) When property is forfeited under this Section the court may order:

(1) that the property shall be made available for the official use of the Agency, the Office of the Attorney General, the State's Attorney of the county in which the violation occurred, or the law enforcement agency which investigated the violation, to be used solely for the enforcement of the environmental protection laws of this State;

(2) the sheriff of the county in which the forfeiture occurs to take custody of the property and remove it for disposition in accordance with law; or

(3) the sheriff of the county in which the forfeiture occurs to sell that which is not required to be destroyed by

law and which is not harmful to the public. The proceeds of such sale shall be used for payment of all proper expenses of the proceedings for forfeiture and sale, including expenses of seizure, maintenance of custody, advertising and court costs, and the balance, if any, shall be apportioned pursuant to subsection (f).

Added by P.A. 85-487, § 1, eff. Jan. 1, 1988.

¹ Paragraph 1022.2 of this chapter.

1045. Civil and criminal remedies not impaired by Act—Construction with Conservation of Oil and Gas etc. Act—Actions by persons adversely affected—Costs and attorney's fees

§ 45. (a) No existing civil or criminal remedy for any wrongful action shall be excluded or impaired by this Act. Nothing in this Act shall be construed to limit or supersede the provisions of "An Act in relation to oil, gas, coal and other surface and underground resources and to repeal an Act herein named", filed July 29, 1941, as amended,¹ and the powers therein granted to prevent the intrusion of water into oil, gas or coal strata and to prevent the pollution of fresh water supplies by oil, gas or salt water or oil field wastes, except that water quality standards as set forth by the Pollution Control Board apply to and are effective within the areas covered by and affected by permits issued by the Department of Mines and Minerals. Providing that if the Department of Mines and Minerals fails to act upon any complaint within a period of ten working days following the receipt of said complaint by the Department, the Environmental Protection Agency may proceed under the provisions of this Act.

(b) Any person adversely affected in fact by a violation of this Act or of regulations adopted thereunder may sue for injunctive relief against such violation. However, no action shall be brought under this Section until 30 days after the plaintiff has been denied relief by the Board under paragraph (b) of Section 31 of this Act.² The prevailing party shall be awarded costs and reasonable attorneys' fees.

(c) Nothing in Section 39.4 of this Act³ shall limit the authority of the Agency to proceed with enforcement under the provisions of this Act for violations of terms and conditions of an endorsed agrichemical facility permit or this Act or regulations hereunder caused or threatened by an agrichemical facility, provided that prior notice is given to the Department of Agriculture which provides that Department an opportunity to respond as appropriate. Amended by P.A. 86-671, § 1, eff. Sept. 1, 1989.

¹ Chapter 96½, § 5401 et seq.

² Paragraph 1031 of this chapter.

³ Paragraph 1039.4 of this chapter.

TITLE XIII: MISCELLANEOUS PROVISIONS

1046. Public bodies—Abatement of violations—Cost of abatement—Funds—Bonds—Sanitary Fund—Eligibility for federal grants

§ 46. (a) Any municipality, sanitary district, county or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, which has been directed by an order issued by the Board or by the circuit court to abate any violation of this Act or of any regulation adopted thereunder shall, unless such order be set aside upon review, take steps for the acquisition or construction of

such facilities, or for such repair, alteration, extension or completion of existing facilities, or for such modification of existing practices as may be necessary to comply with the order. The cost of the acquisition, construction, repair, alteration, completion, or extension of such facilities, or of such modification of practices shall be paid out of funds on hand available for such purposes, or out of the general funds of such public body not otherwise appropriated.

If funds on hand or unappropriated are insufficient for the purposes of this Section, the necessary funds shall be raised by the issuance of either general obligation or revenue bonds. If the estimated cost of the steps necessary to be taken by such public body to comply with such order is such that the bond issue, necessary to finance such project, would not raise the total outstanding bonded indebtedness of such public body in excess of any limit which may be imposed upon such indebtedness, the necessary bonds may be issued as a direct obligation of such public body and retired pursuant to general law governing the issue of such bonds. No election or referendum shall be necessary for the issuance of bonds under this Section.

The funds made available by the issuance of direct obligation or revenue bonds as herein provided shall constitute a Sanitary Fund, and shall be used for no other purpose than for carrying out such order or orders of the Board.

The Attorney General shall enforce this provision of the Act by an action for mandamus, injunction, or other appropriate relief.

(b) In order to be eligible for federal grants for construction of sewage works pursuant to Section 201(g) of the Federal Water Pollution Control Act, as now or hereafter amended,¹ any sanitary district, drainage district, municipality, county, special district or other unit of local government established pursuant to State law, that owns or operates sewage works may adopt, in accordance with such unit's statutory procedures, ordinances or regulations to provide for systems of proportionate cost sharing for operation and maintenance by recipients of such unit's waste treatment services, to provide for payments by industrial users of costs of sewage works construction allocable to the treatment of industrial wastes, and to provide such other capabilities as may be necessary to comply with Sections 204(b), 307, and 308 of the Federal Water Pollution Control Act, as now or hereafter amended.²

(c) In order to comply with Section 307 of the Federal Water Pollution Control Act, as now or hereafter amended, and regulations promulgated thereunder, the units of local government identified in subsection (b) of this Section may adopt, in accordance with such unit's statutory procedures, ordinances or regulations to enable the unit of government, as regards industrial users of sewage works, to control through permit, contract, order or similar means, the nature and amount of pollutants discharged to the sewage works, to require compliance with applicable pretreatment standards and requirements, to require compliance schedules and the submission of notices and self-monitoring reports related thereto, to carry out inspection and monitoring procedures in order to determine compliance or noncompliance with the applicable pretreatment standards and requirements, to obtain remedies including, but not limited to, injunctive relief and civil and criminal penalties for noncompliance with pretreatment standards and requirements, and to provide such other capabilities as may be necessary to comply with Section 307 of the

Federal Water Pollution Control Act, as now or hereafter amended, and regulations promulgated thereunder.

Amended by P.A. 86-671, § 1, eff. Sept. 1, 1989.

¹ 33 U.S.C.A. § 1281.

² 33 U.S.C.A. §§ 1284, 1317 and 1318.

1047. State of Illinois—State agencies—Compliance with act and regulations

§ 47. (a) The State of Illinois and all its agencies, institutions, officers and subdivisions shall comply with all requirements, prohibitions, and other provisions of the Act and of regulations adopted thereunder.

(b) Each state agency or institution shall annually assess the environmental problems created by its operations and the extent to which its operations are in violation of this Act or of regulations adopted thereunder, and shall report to the Environmental Protection Agency on or before December 1 of each year as to the findings of such assessment, the progress made in eliminating such violations, and the steps to be taken in the future to assure compliance.

(c) Each state agency or institution shall submit to the Environmental Protection Agency complete plans, specifications and cost estimates for any proposed installation or facility that may cause a violation of this Act or of regulations adopted thereunder by December 1 of each year.

1048. Licensing of vehicles, vessels or aircraft subject to regulations

§ 48. (a) Whenever the Board has adopted regulations respecting the equipment, specifications, use, inspection, or sale of vehicles, vessels, or aircraft, no department or agency shall license any such vehicles, vessels, or aircraft for operation in this State in the absence of such proof as the Board may prescribe that the equipment in question satisfies the Board's regulations.

(b) Whenever the Board has adopted regulations limiting vehicle, vessel, or aircraft operations to essential or other classes of use under certain conditions, the department or agency responsible for the licensing shall issue indicia of such use, subject to standards prescribed by the Board, for each vehicle, vessel, or aircraft qualifying therefor.

1049. Transitional provisions—Compliance with rules and regulations as prima facie defense

§ 49. (a) Until the Board and the Agency established by this Act has been appointed and taken office, the functions assigned to the Board and to the Agency shall be performed by the members of the existing Air Pollution Control Board and Sanitary Water Board and by the Department of Public Health.

(b) All proceedings respecting acts done before the effective date of this Act shall be determined in accordance with the law and regulations in force at the time such acts occurred. All proceedings instituted for actions taken after the effective date of this Act shall be governed by this Act.

(c) All rules and regulations of the Air Pollution Control Board, the Sanitary Water Board, or the Department of Public Health relating to subjects embraced within this Act shall remain in full force and effect until repealed, amended, or superseded by regulations under this Act.