DEPARTMENT OF COMMUNITY DEVELOPMENT SERVICES



Planning Division

memorandum

TO:	Mayor Laurel Lunt Prussing
FROM:	Elizabeth H. Tyler, FAICP, Director
DATE:	April 18, 2013
SUBJECT:	Amendment to Chapter 16 of the Urbana Code of Ordinances (Noise and Vibrations)

Introduction

In response to prior direction from the City Council, City staff from the Community Development, Public Works, and Police Departments, as well as the Legal Division, are proposing to amend Chapter 16 of the Code of Ordinances (Noise and Vibrations). The proposed changes are primarily intended to address industrial and commercial noise by providing enforceable and fair standards which can be effectively administered by City staff.

Through its Council Goals, the Urbana City Council has indicated its intent to address the Noise Ordinance. Under City Council Goal 6 (Quality of Life, Strategy B, "Zoning/Comprehensive Plan or Ordinance Changes) the following objective has been adopted:

• Develop and enact an industrial noise ordinance that limits noise generated after normal business hours from industries and commercial businesses.

The major change proposed to the noise ordinance is to adopt a local standard for "mechanical stationary noise" which would be apart from the Illinois Pollution Control Board standards.

Community Development staff developed the proposed changes in concert with the City Engineer; the Police Department, which enforces against most noise disturbances; the Environmental Sustainability Division, which enforces against commercial and industrial noise; and the City Attorney.

Background

Noise nuisances come in many forms. Construction noise, amplified music, air conditioners, and loud conversations can all be bothersome in specific circumstances. Often a noise nuisance is associated with a special activity, such as a party or construction. Sometimes, however, a continuous noise can be an issue. Air conditioning units that fall into disrepair can become too loud. A loading dock might take night-time deliveries with the dropping of pallets disturbing neighbors. The time of

day, background noise level, and relative loudness of the sound all contribute to whether sound is considered to be a nuisance.

The attached excerpt from an American Planning Association report, A Conceptual Framework for Industrial Code, provides background information on the issues associated with noise nuisances. Three factors relevant to noise nuisances are frequency, intensity, and time of exposure. Intensity, or loudness, is the aspect of noise that is most immediately apparent. Frequency, or pitch, describes the quality of the noise. High frequency sounds are more piercing than low frequency sounds. Duration is how long one is exposed to the noise. For very loud noises, a longer exposure duration may lead to hearing loss.

If a noise is too loud it can be dangerous to one's health. Sound intensity is measured in decibels (abbreviated dB), which is a measure of air pressure differential. The following table compares the "A-weighted" decibel range of sound. Most household sounds occur below the 80 decibel level.

dBA	Example	Appliances & Equipment
0	healthy hearing threshold	
10	a pin dropping	
20	rustling leaves	
30	whisper	
40	babbling brook	computer
50	light traffic	refrigerator
60	conversational speech	air conditioner
70	shower	dishwasher
75	toilet flushing	vacuum cleaner
80	alarm clock	garbage disposal
85	passing diesel truck	snow blower
	Level at which sustained exposure may result	
90	Train whistle at 500 feet	lawn mower
95	inside subway car	food processor
100	motorcycle (riding)	handheld drill
105	sporting event	table saw
110	rock band	jackhammer
115	emergency vehicle siren	riveter
120	thunderclap	
125	balloon popping	
130	peak stadium crowd noise	
135	air raid siren	
	3: Even short term exposure can cause perman ure WITH hearing protection	ent damage - Loudest recommended
	jet engine at takeoff	
145	firecracker	
150	fighter jet launch	
155	cap gun	
160	shotgun	
165	.357 magnum revolver	
170	safety airbag	
175	howitzer cannon	
180	rocket launch	
194	sound waves become shock waves	
Source	: Table from <u>http://www.noisehelp.com/no</u>	<u>ise-level-chart.html</u> . This is a compilation

Source: Table from <u>http://www.noisehelp.com/noise-level-chart.html</u>. This is a compilation of data from a database of noise levels: <u>http://www.e-a-r.com/pdf/hearingcons/Noise_Nav.xls</u>.

Current Regulations

In Urbana, both City and State noise regulations apply. The City's noise ordinance (Chapter 16 of the Code of Ordinances) is attached as Exhibit A. The State of Illinois has enacted regulations pertaining to noise nuisances (Title 3, Subtitle H of the Illinois Administrative Code) which are attached as Exhibit B. The State's noise regulations fall under the purview of the Illinois Pollution Control Board (IPCB). As state law, the IPCB take precedence over any standards adopted by the City. Urbana may adopt stricter standards but cannot allow noises louder than what would be allowed under IPCB standards.

Loud and Raucous Noise

Urbana's current noise ordinance generally prohibits "loud and raucous" noise which has the following definition:

Loud and Raucous Noise shall mean any sound which, because of its volume level, duration and character, annoys, disturbs, injures or endangers the comfort, health, peace or safety of reasonable persons of ordinary sensibilities within the limits of the City of Urbana. The term shall not include those noises listed as exceptions in <u>section 16-6</u> hereof.

Loud and raucous noises are prohibited when audible from places such as public streets, churches, hospitals, and residences. A loud noise contained inside a building or on a large parcel would not be prohibited if it was not disturb anyone outside of the premises. Although the definition of loud and raucous noise requires some subjective judgment, the Police Department regularly relies on the "loud and raucous" noise prohibition to stop noise disturbances.

Due to their particular nature, certain common, discrete noise problems -- such as construction and power tools, automobile horns, squealing of tire, loud mufflers, and animals disturbing the peace – have their own standards apart from loud and raucous noise. City staff finds that these standards are working adequately, except that standards for construction noise is proposed to be amended as discussed below.

Commercial and Industrial Noise

The noise ordinance classifies commercial and industrial noise differently. Rather than using the definition for loud and raucous noise, the City's ordinance uses the Illinois Pollution Control Board's standards for commercial and industrial noise.

Noise which is a normal by-product of commercial and industrial activity, when the activity producing the noise is occurring on premises where such activity is permitted under the Urbana Zoning Ordinance, in which case such noise shall not be deemed to be a violation of this chapter except as such noise is also in violation of an Illinois Pollution Control Board Order.

Consequently, commercial and industrial noise exceeding the Illinois Pollution Control Board standards is considered a violation of the City's noise ordinance. For the City of Urbana, this presents a barrier for enforcement because the measurement standards adopted by the Illinois Pollution Control Board are quite technical and beyond the ability of most cities to enforce.

City noise enforcement

The existing noise ordinance specifies the following enforcement procedures:

Any emission of noise or earth-shaking vibration from any source in excess of the limitations established in or pursuant to this chapter shall be deemed, and is hereby declared, to be a public nuisance and may be subject to summary abatement procedures. Such abatement may be in addition to the administrative proceedings, fines and penalties herein provided. The director [of Public Works] is empowered to secure the institution of legal proceedings through the city attorney for the abatement or prosecution of emissions of noise and earth-shaking vibration which cause injury, detriment, nuisance or annoyance to the public or endanger the health, comfort, safety or welfare of the public, or cause or have a natural tendency to cause injury or damage to public or property. Such legal proceedings may be in addition to the administrative proceedings, fines and penalties herein provided.

The City now responds to reports of noise violations in one of two ways. For most loud and raucous noise complaints, an Urbana police officer is dispatched to the location to determine whether a violation is occurring and issues either a warning or citation. Normally a first visit will earn a warning and subsequent visits would result in citations. Police officers often issue these citations for loud parties, excessive stereo volume, squealing of tires, loud animals, and other discrete noise sources.

For business-related noise, the Environmental Sustainability Division of the Public Works Department responds to reports of noise violations. The City's Environmental Control Officer will take sound decibel readings using a decibel meter. If the noise is believed to exceed the Illinois Pollution Control Board standards, staff will notify the property owner or facility manager of an apparent violation. Staff then works with the business to address and mitigate the noise. Given the size and complexity of the operation and its processes, identifying the specific noise source(s) can be more difficult, and its abatement more complicated. These cases have seldom resulted in citations or court proceedings, in part because the measurement standards adopted by the Illinois Pollution Control Board are quite technical and beyond the ability of most cities to enforce.

Illinois Pollution Control Board Standards

The Illinois Pollution Control Board (IPCB) noise limits are scaled according to frequency and intensity. Although humans can hear sounds between roughly 20 and 20,000 Hertz (cycles per second), sounds of higher frequencies are perceived to be more intense. For example a high-pitched whine at 10,000 Hertz is more annoying than a low-frequency 50 Hertz rumble, even if both are at the same decibel level. Therefore the IPCB limits for noise vary with frequency.

IPCB limits also vary depending on the land use of the property emitting the sound and the property impacted by the sound. The following is a sample table from the Illinois Statutes. This table shows the daytime decibel limit for noises originating from three use categories and impacting a residential use. Class A uses are generally residential uses, Class B are commercial, and Class C are industrial. As an example, a sound emitted from an industrial land use within the 500 Hertz band may not exceed 58 decibels at the property line of a residence. The full list of land use classifications, as well as all of the noise limit tables are attached in Exhibit E: IPCB statutes.

Octave Band Center Frequency (Hertz)	Daytime Allowable Octave Band Sound Pressure Levels (dB) of Sound Emitted to any Receiving Class A Land from:				
	Class C	Class B	Class A		
31.5	75	72	72		
63	74	71	71		
125	69	65	65		
250	64	57	57		
500	58	51	51		
1000	52	45	45		
2000	47	39	39		
4000	43	34	34		
8000	40	32	32		

Source: Title 35, Subtitle H, Chapter I, Part 901. Illinois Pollution Control Board Standards.

One of the issues causing difficulty in enforcing IPCB standards is that neither the Illinois Pollution Control Board nor the Illinois Environmental Protection Agency actively enforce the standards. Instead, either private individuals or units of government must file complaints to the IPCB for their review and determination. In order to bring a case before the IPCB, one must have all of the measurements collected according to IPCB standards. The measurement standards are quite technical (see Exhibit E), and are beyond the ability of most cities to follow. Often an acoustical consultant must be hired to properly measure and evaluate the noise.

Other Approaches

Staff considered many options for the best way to improve the City's commercial and industrial noise standards. In reviewing other cities' ordinances, City staff observes that there are many approaches adopted to control noise, along with a wide range of decibel limits. Some cities simply adopt the Illinois Pollution Control Board limits (or their own state's equivalent), either by adopting the actual decibel limits, or by reference to the statute.

Other cities have adopted their own decibel limits. In this case communities generally choose a single decibel limit and take the A-rated frequency rating, which is much simpler to measure than a table of limits for different frequency bandwidths. In most cases, cities have stricter limits for nighttime noise than for daytime. Cities adopt limits for noise based on the land use of the source, or the land use of the receiving property, or some combination thereof. A few cities have even more general limits. For example the City of Wichita, Kansas prohibits noise which exceeds the ambient (background) sound level by five decibels. Exhibit B lists noise level limits for selected communities.

Central Illinois

Both the City of Champaign and Champaign County both have regulations that are qualitative in nature. In the City of Champaign, noise which can be heard inside a neighboring dwelling is considered a nuisance. In Champaign County, a nuisance noise is defined as "a noise discernible by person of average sensibility within a dwelling between 10PM and 7AM, not customarily associated

with a use permitted in that zoning district." Other central Illinois cities, such as Decatur and Normal, only regulate amplified noise that can be heard from a specified distance. This approach allows for police officers or other officials to interpret any noise as a nuisance without the need for taking a sound level measurement. This is the approach Urbana currently uses for "loud and raucous noise". However, Urbana City staff recommend revising the ordinance to use a more objective approach to enforcing against industrial and commercial noise.

City of Chicago

The City of Chicago takes a middle ground approach to noise enforcement. Generally, noise may not be "louder than an average conversation level at a distance of 100 feet or more". The Chicago ordinance defines "noise disturbance" as any sound which is audible at a distance of 600 feet or more from the source. Chicago has specific regulations for "mechanical stationary sources" of noise, which are meant to regulate sounds from building systems, factories, and parked vehicles. These noises may not be above 55 decibels if the source of the noise is 100 feet away from the property line, or 70 decibels if the source is closer than 100 feet to the property line.

Although Illinois municipalities could adopt limits equal to IPCB standards directly within their ordinance, relatively few of the surveyed cities choose this approach. A potential downside is if the IPCB statutes are changed, the City's ordinance would be out of compliance. Also, the IPCB standards are difficult to measure, and would require a consultant to be hired to determine if every complaint was a violation.

Proposed Changes

In order to provide enforceable and fair standards which can be administered more effectively, City staff is proposing a comprehensive amendment to the noise ordinance. The proposed draft ordinance is attached as Exhibit C. These proposed changes resulted from a collaborative effort between Community Development, Public Works, Legal, and Police staff. Due to the comprehensive and structural nature of the proposed changes it is not feasible to provide a strikeout and underline format draft of the ordinance. Instead this memorandum will summarize the proposed changes by section.

Based upon identification of conditions and needs specific to Urbana, City staff is recommending enactment of noise level limits based on a single decibel level (one for daytime and one for nighttime). The noise would be measured using the A-weighted frequency band, which is the standard for the majority of other noise ordinances and industrial statutes. The A-weighted frequency band takes into account all frequencies, but places a slight emphasis on sounds from 1,000 to 6,000 Hertz.

Section 16-1 – Policy

The City Attorney has proposed this new section which will state the intent of the ordinance.

Section 16-2 – Definitions

This section has been moved from 16-1 to 16-2 to make room for the Policy section. The current ordinance has only two definitions: "loud and raucous noise" and "amplified sound". The proposed changes would delete "amplified sound", which is no longer distinguished as a separate category of noise. It also adds several definitions:

- Boundary Line
- City
- Complainant
- Construction Equipment
- Mechanical Stationary Noise (see Section 16-9)
- Non-Residential Property
- Residence

Each of these terms is specifically referenced in the new regulations.

Section 16-3 – Loud and Raucous Noises Prohibited

This section replaces 16-2 (Prohibited Generally). The text is nearly identical but with a few minor clarifications. Section 16-3 of the existing ordinance was vacant (reserved).

16-4 - (Reserved)

Former section 16-4 (Persons Responsible) has been moved and is now a part of section 16-10 (Noise Abatement and Remediation).

16-5 – Exceptions

This section has undergone minor clarifications, such as an exception added for clock towers, bells, and carillons. However, the final paragraph has one substantial change. While the current ordinance exempts commercial and industrial noise if it does not violate the Illinois Pollution Control Board standards, the proposed changes re-categorize commercial and industrial noise as "mechanical stationary noise". Staff is proposing to remove the reference to IPCB limits. By state law, those limits will still apply to any type of noise created within the City (or anywhere throughout the state of Illinois). However, new standards are provided for all types of mechanical stationary noise. Mechanical stationary noise under 80 decibels would not be classified as loud and raucous noise and would allow a reasonable time period for proper study and abatement, as established in Section 16-9. But mechanical stationary noise greater than 80 decibels is to be classified as loud and raucous meaning that the Police Department would have authority to issue citations and order the noise to cease immediately.

Sec. 16-6. – (Reserved)

This former section, Certain Noise Problems, stated that "certain noise problems are not best addressed in this article". It then went on to list various issues that are all dealt with in the sections that immediately follow (16-7, 16-8, and 16-9). Staff is proposing to remove this section, as those noise problems are addressed elsewhere in the proposed Ordinance.

Sec. 16-7. – Construction and Maintenance Noise

Formerly titled Construction Operations, this section several proposed changes. A broader definition for construction equipment has been created in Section 16-2 which will better take into account changes in construction equipment and technology. The time of day when outdoor construction would be allowed has been adjusted based on input from the Police Department, which enforces this section of the noise ordinance, as well as the Building Safety Division and Public Works Department. Currently the City's noise ordinance prohibits construction between 8:00 P.M. and 8:00 A.M., Monday through Saturday, and on Sunday construction cannot begin until noon. Especially for

the construction industry, the 8:00 A.M. or noon start time presents a challenge in that roof and some other construction work can be dangerously hot in the summer, and beginning work an hour earlier would be helpful in that regard. Additionally, both the City of Champaign and Village of Savoy allow outdoor construction to begin at 7:00 A.M. The proposed ordinance would allow outdoor construction 7:00 A.M. to 8:00 P.M., seven days a week. An exception is also proposed for emergency situations such as using generators and pumps to alleviate power failures and flooding.

Sec. 16-8. – Motor Vehicles and Vehicle Horns

This section combines former Section 16-8 (Motor Vehicles) and 16-9 (Horns and Signaling Devices on Vehicles). A few minor modifications to the text have been added to clarify intent and to make the structure consistent.

Sec. 16-9. – Mechanical Stationary Noise

This section is entirely new and has been created to better address the procedures and enforcement of commercial and industrial noise. The term "mechanical stationary noise" is borrowed from the City of Chicago's noise ordinance. Staff is proposing to adopt the following definition to section 16-2:

"Mechanical Stationary Noise" shall mean any noise caused or produced by mechanical motion, including but not limited to harmonic, periodic, vibrational, oscillating, rolling, or rotary motion. For the purposes of this definition, the term shall not include construction or maintenance-related noise prohibited by Section 16-7.

This definition encapsulates noises made by industrial equipment, air handlers and vents, air conditioners, generators, refrigeration units, and any of the above connected to trailers or vehicles which are not in motion. It is targeted at commercial and industrial land uses, but would also apply to mechanical stationary noise on a residential property.

The proposed regulations limit mechanical stationary noise to 60 decibels during daytime hours (7:00 AM to 10:00 PM), and 55 decibels at night, as measured with an A-weighted sound meter. These limits are in line with other cities, as discussed previously. These standards are compatible with the IPCB limits, which vary from 40 to 75 decibels, depending on frequency.

In terms of impact upon commercial and industrial facilities within Urbana, City staff visited a sample of local industrial facilities and took sound measurements at the property line. These measurements varied from 56 to 63 decibels. The only facility above 60 dB, Dart Container, is currently in the process of remediating the noise from their operations, with improvements scheduled to be complete this year. As a result, it is believed that all facilities within the city will be within the proposed limits.

As with "loud and raucous" noise, the City would enforce limits on mechanical stationary noise on a complaint basis. The proposed ordinance specifies that the sound level shall be measured within five feet of the property line, which provides some leeway in the case where the exact property line location is not known. If the noise is exceptionally loud (over 80 dB) it shall be considered "loud and raucous" and a police officer may order it to be abated immediately.

Finally, this section spells out the abatement procedures for mechanical stationary noise. Initially, the City will reach out to the property owner or facility manager to abate the noise. If the noise continues

to be an issue for three or more days, the City will require the owner or manager to submit a plan within seven days detailing how the noise problem will be remediated. The plan must provide for a solution of the issue within 30 days of the initial noise complaint. If no plan is submitted, or if the owner or manager fail to follow through in a timely manner, the City may issue a fine of \$200 per day of violation.

Sec. 16-10. – Noise Abatement and Remediation

Paragraph A contains some of the language from the original Section 16-10, Abatement. The language has been modified by the City Attorney to remove unnecessary verbiage. Paragraph B contains the language from the original Section 16-4, Persons Responsible. This language has been slightly modified to reference specific terms defined in the proposed ordinance.

Sec. 16-11. – Legal Actions Unimpaired

Section 16-11, which makes explicit that individuals can pursue noise abatement apart from this ordinance and under common law, will remain unaltered.

Fiscal Impacts

Adopting the proposed noise ordinance will result in savings for the City. Under the current ordinance, if a property owner is unwilling to remediate any commercial or industrial noise violation, the City would have to bring a case against them to the Illinois Pollution Control Board. In order to do so, the City would need to hire a sound consultant to take measurements according to IPCB standards. In the past the City has retained a sound consultant to give advice on a couple different cases. This cost the City roughly \$9,000. Adopting the proposed standards would allow the City to measure noise with equipment that we already own and use.

There will be no impact on income from noise violation tickets issued by the Police Department. Those procedures will remain the same.

Options

The Urbana City Council has the following options in this case:

- 1. Approve the proposed changes to Chapter 16 of the Code of Ordinances, as presented;
- 2. Approve the proposed changes to Chapter 16 of the Code of Ordinances, with specific modifications; or
- 3. Deny approval of the proposed changes to Chapter 16 of the Code of Ordinances.

Recommendation

Staff recommends that City Council APPROVE the proposed changes to Chapter 16 of the Code of Ordinances, as presented.

Attachments:

- Exhibit A: City Code, Chapter 16, Noise and Vibrations (Current Ordinance)
- Exhibit B: Noise Limits for Selected Cities
- Exhibit C: Proposed Noise Ordinance
- Exhibit D: Excerpt: Industrial Performance Standards for a New Century, PAS Report No. 444 (Chicago: APA, April 1993)
- Exhibit E: Illinois Pollution Control Board Statutes (Title 3, Subtitle H of the Illinois Administrative Code)

ORDINANCE NO. 4235/26/258

An Ordinance Amending Chapter 16 of the Urbana City Code (Noise Ordinance)

WHEREAS, the City of Urbana, Illinois, is a home-rule unit of local government under the Illinois Constitution, 1970, Article VII, Section 6; and

WHEREAS, the Urbana City Code has periodically been recodified and republished by the City of Urbana to incorporate the numerous amendments; and

WHEREAS, the Urbana City Council has adopted a goal directing staff to "develop and enact an industrial noise ordinance that limits noise generated after normal business hours from industries and commercial businesses"; and

WHEREAS, the Urbana Zoning Administrator proposes to enact an amendment to Chapter 16 of the Urbana City Code in order to improve quality of life and to make noise standards easier to enforce; and

WHEREAS, after due and proper consideration, the Urbana City Council has deemed it to be in the best interest of the City of Urbana to amend the text of the Urbana City Code as described herein.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF URBANA, ILLINOIS, that Chapter 16 of the Urbana City Code shall be amended as follows:

Section 1. Urbana City Code Chapter 16, "Noise and Vibrations", Article I, Section 1, is hereby amended and as amended shall read as follows:

Section 16-1. - Policy.

It shall be the policy of the City of Urbana to discourage, reduce and, where reasonably feasible, require the mitigation of any noise, regardless of how generated, produced, or broadcasted, which is perceived by an individual of ordinary and reasonable sensibilities and sensitivities to be of such a level, duration, nature, or character as annoying, disturbing, injurious, harmful, dangerous, or otherwise unsafe.

Section 2. Urbana City Code Chapter 16, "Noise and Vibrations",

Article I, Section 2, is hereby amended and as amended shall read as follows:

Sec. 16-2. - Definitions.

"Boundary Line" shall mean and include the actual property line which constitutes the perimeter of a real estate parcel as defined by that parcel's legal description.

"City" shall mean the City of Urbana.

"Complainant" shall mean and include an individual of ordinary and reasonable sensibilities and sensitivities who reports any potential violation of this Chapter to the City of Urbana, or Police Chief of the City of Urbana, or their agent, where such agent determines that any sound may be a violation of this Chapter.

"Construction Equipment" shall mean any tool, device, or machine, whether motorized or non-motorized, which is powered by combustion, electricity, or compressed gas and used for construction or property maintenance purposes. The term shall include, but not be limited to, graders, bulldozers, dump trucks, tractors, jack hammers, pumps, generators, nail guns, air compressors, lawn mowers, and leaf blowers. For the purposes of this definition, the term shall additionally include use of any hand-powered hammering.

"Loud and Raucous Noise" shall mean any noise which, because of its volume level, duration and/or character, would be reasonably deemed to annoy, disturb, injure or endanger the comfort, health, peace or safety of any Complainant. The term shall exclude those noises listed as exceptions in Section 16-5 hereof.

"Mechanical Stationary Noise" shall mean any Noise caused or produced by mechanical motion, including but not limited to harmonic, periodic, vibrational, oscillating, rolling, or rotary motion. For the purposes of this definition, the term shall not include construction or maintenance-related noise prohibited by Section 16-7.

"Non-Residential Property" shall mean and include any real property which is used or which is intended for use by other than any Residence.

"Residence" shall mean any dwelling, dormitory, rooming house, or nursing home which is legally established and occupied per the Urbana Zoning Ordinance. Section 3. Urbana City Code Chapter 16, "Noise and Vibrations",

Article I, Section 3, is hereby amended and as amended shall read as follows:

Sec. 16-3. - Loud and Raucous Noise Prohibited.

a. It shall be unlawful and a violation of this Ordinance for any person to generate, produce, create, broadcast, manufacture, maintain, or cause or facilitate the generation, production, creation, broadcast, manufacture, or maintenance of any Loud and Raucous Noise when such noise is audible from any:

- i. public street;
- ii. public park;
- iii. school, whether public or private, or upon the grounds of any such school;
- iv. publicly-owned building or upon the grounds of any publicly owned building;
- v. religious house of worship, affiliated building associated with any such religious house of worship, or the grounds of any religious house of worship or affiliated building associated with any such religious house of worship;
- vi. hospital, clinic, surgical center or the grounds of any such entity unless necessary for the direct provision of patient;
- vii. parking lot, whether public or private; or
- viii. Residence.

Section 4. Urbana City Code Chapter 16, "Noise and Vibrations",

Article I, Section 4, is hereby amended and as amended shall read as follows:

Section 16-4 (Reserved)

Section 5. Urbana City Code Chapter 16, "Noise and Vibrations",

Article I, Section 5, is hereby amended and as amended shall read as follows:

Sec. 16-5. - Exceptions.

The term "Loud and Raucous Noise" shall not be deemed to include or apply to any noise which is produced, generated, manufactured, or broadcasted by:

a. Cries or loud calls for emergency assistance or of warning;

b. Radios, sirens, horns, or bells which emanate from police, fire, ambulance, or other emergency response vehicles;

c. Special events such as parades, races, fireworks displays, and block parties for which the City of Urbana has issued a Special Events Permit, as well as sidewalk cafes licensed pursuant to City Council approval, so long as the aforesaid are conducted pursuant to the conditions of the permit or license and all City ordinances.

d. Activities on or in municipal and school athletic facilities and on or in publicly owned property and facilities provided that such activities have been authorized by the owner or operator of such municipal or school property;

e. Fire alarms and security alarms prior to the giving of notice and a reasonable opportunity for the owner or tenant of the premises, police department, fire department, or other first responders to turn-off or otherwise cancel the alarm or security system;

f. Religious worship activities including but not limited to the ringing of bells, the playing of musical instruments, the singing or chanting of choirs, or the singing or chanting of those in attendance at such worship activities;

- g. Clock towers, bell towers, and carillons;
- h. Rail locomotives and other railroad equipment;
- i. Aircraft;
- j. Generators and pumps used to relieve an emergency situations such as electrical power outages or flooding of buildings; or
- k. Mechanical Stationary Noise of less than 80 decibels.

Section 6. Urbana City Code Chapter 16, "Noise and Vibrations", Article I, Section 6, is hereby amended and as amended shall read as follows:

Sec. 16-6. (reserved)

Section 7. Urbana City Code Chapter 16, "Noise and Vibrations", Article II, Section 7, is hereby amended and as amended shall read as follows:

Sec. 16-7. - Construction and Maintenance Noise.

It shall be unlawful for any person to use any Construction Equipment to perform any construction or maintenance outside of any completely enclosed building at any time between the hours of 8:00 p.m. and 7:00 a.m. where such Construction Equipment is operated within six hundred (600) feet of any Residence, hospital, or place of worship, unless the use of such equipment or tools is necessary to address an emergency which, if left unaddressed, would cause or create harm, danger, or serious inconvenience to any person or property.

Section 8. Urbana City Code Chapter 16, "Noise and Vibrations", Article II, Section 8, is hereby amended and as amended shall read as

follows:

Sec. 16-8. - Motor Vehicles and Automobile Horns.

Notwithstanding anything to the contrary elsewhere in this Chapter:

a. It shall be unlawful for any person to operate any motor or engine of a motor vehicle which weighs in excess of four (4) tons gross weight for a consecutive period longer than two (2) minutes while such motor vehicle is standing on private property which is located within one hundred fifty (150) feet of any Residence except where such vehicle:

i. is standing within a completely enclosed structure;

ii. is required to remain stationary due to weather or traffic conditions; or

iii. is engaged in, addressing or responding to an emergency situation or condition.

b. It shall be unlawful for any person to operate or permit the operation of any sound amplification system in or on any motor vehicle which can be heard outside the vehicle from a distance of seventy-five (75) feet from the vehicle where such vehicle is located or operated on a public right of way unless such sound amplification is a necessary part of any response to or attendance of an emergency situation or condition.

c. It shall be unlawful for a person to operate or permit the operation of a motor vehicle:

- i. which is equipped with a siren, whistle, bell, or auditory signaling device unless such vehicle is an emergency vehicle or unless such device is present as part of an anti-theft or security device which cannot be activated except as a result of efforts to unlawful take, use or harm a motor vehicle;
- ii. which is not equipped with a muffler and exhaust system in good working order and which is in operation at all times during the operation of the vehicle's motor or engine;
- iii. which is equipped with an exhaust system which has been modified or otherwise altered so as to amplify or increase the sound level of the said vehicle's motor or engine beyond that sound which would otherwise be produced, generated or broadcasted should such vehicle be equipped with the exhaust system which the manufacturer of said vehicle would normally install in said vehicle; or
- iv. in such a manner and on any public right of way, street, or highway so as to cause that vehicle's tires to produce, generate or broadcast a squealing, screeching, or similar sound by reason of rapid acceleration of the said vehicle.

d. It shall be unlawful for any person to sound any horn or audible signal device of any motor vehicle of any kind while the vehicle is not in motion nor shall any such horn or audible signal device be sounded except otherwise provided by law. Notwithstanding the foregoing, it shall not be deemed a violation of this Section should a horn or audible signal device be sounded in connection with responding to or attendance at an emergency situation or condition.

e. This Section shall apply to motor vehicles which are defined or classified as such pursuant to the Illinois Vehicle Code as from time-to-time amended. However, this Ordinance shall not apply to motor vehicles which are engaged in interstate commerce.

f. The penalty for violating this Section shall be seven hundred fifty and no/hundredths dollars (\$750.00).

Section 9. Urbana City Code Chapter 16, "Noise and Vibrations",

Article II, Section 9, is hereby amended and as amended shall read as

follows:

Sec. 16-9. - Mechanical Stationary Noise.

a. No person shall operate or permit the operation of any stationary equipment, device, or machine, whether located inside or outside a building structure, in such a manner so as to produce, generate, manufacture, or broadcast Mechanical Stationary Noise_at a decibel level greater than 55 decibels during the hours of 10:00 p.m. and 7:00 a.m., or greater than 60 decibels at any other time, when such decibel level is measured in the manner provided for in Section 16.9.d.

b. Mechanical Stationary Noise Less than 80 decibels. In the event that a sound condition which is deemed in violation of Section 16-9., whether or not any such violation ticket has been issued, exists for a period of three or more consecutive days, the owner or operator of the property on which such condition exists shall be given seven days in which to submit a plan of remediation to reduce the sound decibel level to below that which is provided in Sub-Section 16-9.a which plan shall provide that such remediation shall be undertaken and completed no later than thirty days from the date when the condition is brought to the attention of the owner or operator of the said premises by the Director of Public Works or his/her designee.

c. Mechanical Stationary Noise Greater than 80 decibels. Mechanical Stationary Noise greater than 80 decibels shall be deemed Loud and Raucous Noise. When Mechanical Stationary Noise is reasonably believed by the Police Chief of the City of Urbana, or their agent, to be greater than 80 decibels, the Police Chief, or their agent, may order immediate sound abatement without the need for a remediation plan.

d. *Mechanical Stationary Noise Measurement*. For determining whether a Mechanical Stationary Noise is to be deemed to constitute a violation of this Ordinance, a measurement of the decibel level of such sound shall be undertaken with a decibel meter set to A-weight and in the following manner:

The decibel level measurement of such sound shall be taken from any location within five (5) feet of the Boundary Line of the property on which the Mechanical Stationary Noise is located. If the decibel level of the measurement equals or exceeds the decibel level provided for in Section 16-9.a. of this Ordinance such sound shall be deemed a violation of this Ordinance.

e. Enforcement and Fines. The Director of Public Works or his/her agent shall have the authority to enforce the provisions of Section 16-9. The penalty for violating Section 16.9. shall be no more than two hundred and no/hundredths dollars (\$200.00) per offense. Each day during which a violation of Section 16-9. exists shall constitute a separate offense of Section 16.9.

Section 10. Urbana City Code Chapter 16, "Noise and Vibrations", Article III, Section 10, is hereby amended and as amended shall read as follows:

Sect. 16-10. - Noise Abatement and Remediation.

a. Any noise in violation of the Chapter shall be declared a public hazard and it shall be the responsibility of the person identified herein to abate or remediate the violation within a reasonable time given the nature and manner by which the prohibited noise is produced.

b. Persons Responsible for Noise Abatement.

Presumption. The occupant of the property or Residence, or the agent of the occupant on which a prohibited noise takes place, shall be presumed to have permitted the noise to occur; this presumption may be rebutted by evidence of a bona fide effort to prevent a violation of this chapter.

Responsibility. The occupant of the property or Residence, or the agent of the occupant, who shall permit another person to create a noise or conduct a noise as prohibited in this Chapter shall be deemed responsible for the noise or activity to the same extent as the person creating the noise or conducting the activity and shall be subject to the same punishment.

Construction Equipment. Any person in charge of operating, ordering, directing or allowing the operation or maintenance of Construction Equipment creating a noise as prohibited in this chapter, shall be deemed guilty of violating this Chapter.

Section 11. Urbana City Code Chapter 16, "Noise and Vibrations", Article III, Section 11, shall read as follows:

Sect. 16-11. - Legal Actions Unimpaired.

Nothing in this chapter shall be construed to impair any cause of action, or legal remedy therefor, or any person or the public for injury or damage arising from the emission or release into the atmosphere or ground from any source whatever of noise or earthshaking vibration in such place or manner, or at such levels, so as to constitute a common-law nuisance.

Section 12. The City Clerk is directed to publish this Ordinance in pamphlet form by authority of the corporate authorities. This Ordinance shall be in full force and effect from and after its passage and publication in accordance with the terms of Chapter 65, Section 1-2-4 of the Illinois Compiled Statutes (65 ILCS 5/1-2-4).

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This Ordinance is hereby passed by the affirmative vote, the "ayes" and "nays" being called of a majority of the members of the City Council of the City of Urbana, Illinois, at a regular meeting of said Council on the _____ day of ______, 2013.

PASSED by the City Council this _____ day of _____, 2013.
AYES:
NAYS:
ABSTAINED:
Phyllis D. Clark, City Clerk
APPROVED by the Mayor this _____ day of _____, 2013.

Laurel Lunt Prussing, Mayor

CERTIFICATE OF PUBLICATION IN PAMPHLET FORM

I, Phyllis D. Clark, certify that I am the duly elected and acting Municipal Clerk of the City of Urbana, Champaign County, Illinois. I certify that on the _____ day of ______, 2013, the corporate authorities of the City of Urbana passed and approved Ordinance No. ______, entitled "An Ordinance Amending Chapter 16 of the Urbana City Code (Noise Ordinance)" which provided by its terms that it should be published in pamphlet form. The pamphlet form of Ordinance No. ______, including all of its attachments, was prepared, and a copy of such Ordinance was posted in the Urbana City Building commencing on the ______ day of ______, 2013, and continuing for at least ten (10) days thereafter. Copies of such Ordinance were also available for public inspection upon request at the Office of the City Clerk.

DATED at Urbana, Illinois, this _____ day of _____, 2013.

ARTICLE I. - IN GENERAL

<u>Sec. 16-1. - Definitions.</u> <u>Sec. 16-2. - Prohibited generally.</u> <u>Sec. 16-3. - Reserved.</u> <u>Sec. 16-4. - Persons responsible.</u> <u>Sec. 16-5. - Exceptions.</u> <u>Sec. 16-6. - Certain noise problems.</u>

Sec. 16-1. - Definitions.

Loud and raucous noise. Loud and Raucous Noise shall mean any sound which, because of its volume level, duration and character, annoys, disturbs, injures or endangers the comfort, health, peace or safety of reasonable persons of ordinary sensibilities within the limits of the City of Urbana. The term shall not include those noises listed as exceptions in <u>section 16-6</u> hereof.

Amplified sound. Amplified sound shall mean the sound produced by any machine or device for the amplification of the human voice, music, or any other sound.

(Ord. No. 9394-24, § 1, 9-7-93) Editor's note—

Ordinance No. 9394-24, adopted Sept. 7, 1993, repealed §§ 16-1, 16-21—16-26, 16-38 and 16-39, which pertained to noise and vibrations and derived from Code 1975, §§ 36.1, 36.7—36.19. Section 1 of Ord. No. 9394-24 has been included as a new § 16-1; section 2 of Ord. No. 9394-24 has been included as a new § 16-2 and sections 4—6 of Ord. No. 9394-24 have been included as new §§ 16-4—16-6, at the discretion of the editor.

Sec. 16-2. - Prohibited generally.

It shall be unlawful and a violation of this ordinance for any person responsible as defined herein to willfully make, continue or cause to be made or continued, any loud and raucous noise when such noise is audible in any one (1) of the following places:

(1)

Upon the public streets;

(2)

In any public park;

the

(3)	
	In any school or public building or upon the grounds thereof while in use;
(4)	
	In any church or hospital or upon the grounds thereof while in use;
(5)	Upon any parking lot open to members of the public as invitees or licensees;
(6)	
	In any occupied residential unit which is not the source of the noise or upon the grounds thereof.
(7)	
	If amplified sound, when such is audible, at the boundary line of the property from
	which such sound is emanating. The term boundary line shall mean:
	In the case of a residential unit in a structure containing more than one (1) residential unit, the boundary line shall be the perimeter of such unit.
	Residential unit shall be that area under the exclusive use or control of the
	owner or occupant;
	b.
	In all other cases, the boundary line shall be the perimeter of the lot or lots as defined by the property line or on the side abutting public right-of-way, the property line or on the side abutting public right-of-way.
	public sidewalk, if any or, if no public sidewalk exists on the perimeter of
	such property, then the boundary line shall be the curb line.

(Code 1975, § 36.1; Ord. No. 9394-24, § 2, 9-7-93; Ord. No. 9596-24, § 1, 9-8-95)

Note—See the editor's note following § 16-1

Sec. 16-3. - Reserved.

Editor's note-

Ord. No. 9596-24, § 2, adopted Sept. 18, 1996, repealed <u>§ 16-3</u>, which pertained to required warnings, and derived from Ord. No. 9394-24, § 3, adopted Sept. 7, 1993.

Sec. 16-4. - Persons responsible.

(a)

The occupant of the property or residential unit, or the agent of the occupant on which a prohibited activity takes place shall be presumed to have permitted the activity to occur; this presumption may be rebutted by evidence of a bona fide effort to prevent a violation of this chapter.

(b)

The occupant of the property or residential unit, or the agent of the occupant who shall permit another person to create a noise or conduct an activity in violation of this chapter shall be deemed responsible for the noise or activity to the same extent as the person creating the noise or conducting the activity and shall be subject to the same punishment.

(C)

Any person in charge of operating, ordering, directing or allowing the operation or maintenance of the device or machine creating a noise as prohibited in this chapter, shall be deemed guilty of violating this chapter.

(Ord. No. 9394-24, § 4, 9-7-93)

Note—See the editor's note following § 16-1

Sec. 16-5. - Exceptions.

The term "loud and raucous noise" does not include noise or sound generated by the following:

(1)

Cries for emergency assistance and warning calls.

(2)

Radios, sirens, horns and bells on police, fire and other emergency response vehicles.

(3)

Parades, fireworks displays, sidewalk cafes and other special events for which a permit has been obtained from the city, within such hours and conditions as may be imposed for the issuance of the permit.

(4)

Activities on or in municipal and school athletic facilities and on or in publicly owned property and facilities, provided that such activities have been authorized by the owner of such property or facilities or its agent.

(5)

Fire alarms and burglary alarms, prior to the giving of notice and a reasonable opportunity for the owner or tenant in possession of the premises served by any such alarm to turn off the alarm.

(6)

Religious worship activities, including but not limited to bells and organs.

(7)

Locomotives and other railroad equipment, and aircraft.

(8)

Noise which is a normal by-product of commercial and industrial activity, when the activity producing the noise is occurring on premises where such activity is permitted under the Urbana Zoning Ordinance, in which case such noise shall not be deemed to be a violation of this chapter except as such noise is also in violation of an Illinois Pollution Control Board Order.

(Ord. No. 9394-24, § 5, 9-7-93; Ord. No. 2006-10-130, § 1, 12-4-06)

Note—See the editor's note following § 16-1

Sec. 16-6. - Certain noise problems.

Certain noise problems by their nature are not best addressed in this article, but shall be prosecuted under the specific Urbana City Code sections designed to deal with such problems:

(1)	
	Section 16-7 (Construction and use of power tools).
(2)	
	Section 16-9 (Automobile horns).
(3)	
(4)	Section <u>4-5</u> (Animals disturbing the peace).
(4)	
(5)	Section 16-8(d) (Squealing of tires).
(0)	Section 16-8(c) (Loud mufflers).

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(Ord. No. 9394-24, § 6, 9-7-93)
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Note—See the editor's note following § 16-1

ARTICLE II. - SPECIFIC PROHIBITIONS

Sec. 16-7. - Construction operations.

Sec. 16-8. - Motor vehicles.

Sec. 16-9. - Horns and signalling devices on vehicles.

Sec. 16-7. - Construction operations.

It shall be unlawful for any person to use any pile driver, shovel, hammer derrick, hoist tractor, roller or other mechanical apparatus operated by fuel or electric power in building or construction operations between the hours of 8:00 p.m. and 8:00 a.m. Monday through Saturday, and 8:00 p.m.

and 12:00 noon Sunday, except for emergency work, within six hundred (600) feet of any building used for residential or hospital purposes.

(Code 1975, § 36.4)

Sec. 16-8. - Motor vehicles.

(a)

Excessive standing while running. It shall be unlawful for any person to operate any motor of a motor vehicle of a weight in **excess of four (4) tons for a consecutive period longer than two (2) minutes while such vehicle is standing on private property and located within one hundred fifty (150) feet of property zoned and used for residential purposes except where such vehicle is standing within a completely enclosed structure, and except when traffic conditions or weather conditions necessitate such. This subsection shall not apply to buses operated for the transportation of passengers while standing in established bus turnarounds, bus terminals, bus parking lots and bus storage yards.**

(b)

Sound systems. No person shall operate or permit the operation of any sound amplification system in or on any motor vehicle which can be heard outside the vehicle for a distance of seventy-five (75) feet or more when the vehicle is operated or located on a public right-of-way, unless such system is being operated to request assistance or warn of a hazardous situation.

(C)

Exceptions. No person shall operate a motor vehicle or permit the operation of a motor vehicle which:

(1)

Is equipped with a siren, whistle, bell or gong signaling device unless such vehicle is an emergency vehicle or unless such device is capable of being used only as an antitheft device and can not be used as an ordinary warning signal;

(2)

Is not equipped with a muffler and exhaust system which is in constant operation and good working order;

(3)

Is equipped with an exhaust system which has been modified so as to amplify or increase the noise of such vehicle above that emitted by the exhaust system originally installed on the vehicle.

(d)

Excessive acceleration. No person shall operate a motor vehicle on any highway within the City of Urbana in such a manner as to cause or allow to be emitted squealing, screeching, or other such noise from the tires in contact with the ground because of rapid acceleration or excessive speed around corners or other such reason, except that noise resulting from emergency operation to avoid imminent danger shall be exempt from this provision.

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(e)

The provisions of this article shall apply only to motor vehicles as defined in the Illinois Vehicle Code which are operated upon or located upon a public right-of-way, except this section shall not be deemed to apply to motor vehicles engaged in interstate commerce. The definitions set forth in the Illinois Vehicle Code shall be the definitions that are applicable to such words used in this section.

(f)

Penalty for violation. Any person found guilty of a violation of this section shall be punished by a fine not exceeding seven hundred fifty dollars (\$750.00) pursuant to <u>section 1-10</u> of this Code of Ordinances.

(Ord. No. 9394-24, § 4, 9-7-93; Ord. No. 9596-27, §§ 1—3, 9-18-95; Ord. No. 2004-03-026, § 2, 5-17-04)

Note—See the editor's note following § 16-1

Sec. 16-9. - Horns and signalling devices on vehicles.

No person shall sound any horn or audible signal device of any motor vehicle of any kind while the vehicle is not in motion; nor shall such horn or signal device be sounded under any circumstances except as required by law, and except as reasonably required for other emergency circumstances; nor shall it be sounded for any unnecessary period of time.

(Code 1975, § 36.14) Cross reference— Traffic and motor vehicles, Ch. 23.

ARTICLE III. - MISCELLANEOUS

<u>Sec. 16-10. - Abatement.</u> <u>Sec. 16-11. - Legal actions unimpaired.</u>

Sec. 16-10. - Abatement.

Any emission of noise or earth-shaking vibration from any source in excess of the limitations established in or pursuant to this chapter shall be deemed, and is hereby declared, to be a public nuisance and may be subject to summary abatement procedures. Such abatement may be in addition to the administrative proceedings, fines and penalties herein provided. The director is empowered to secure the institution of legal proceedings through the city attorney for the abatement or prosecution of emissions of noise and earth-shaking vibration which cause injury, detriment, nuisance or annoyance to the public or endanger the health, comfort, safety or welfare of the public, or cause or have a natural tendency to cause injury or damage to public or property. Such legal proceedings may be in addition to the administrative proceedings, fines and penalties herein provided.

(Code 1975, § 36.21)

Sec. 16-11. - Legal actions unimpaired. 🥜

Nothing in this chapter shall be construed to impair any cause of action, or legal remedy therefor, of any person or the public for injury or damage arising from the emission or release into the atmosphere or ground from any source whatever of noise or earthshaking vibration in such place or manner, or at such levels, so as to constitute a common-law nuisance.

(Code 1975, § 36.22)

Exhibit B: Noise Limits for Selected Cities

Chabada			dB Limits	81:-k+	
Statute	Sound Measured On:	Sound Coming From:	Daytime	Night	Notes
IPCB Standards	Residential Uses Commercial Uses	Industrial Uses Industrial Uses Impulsive Sounds	40-75 45-80 53	32-69 45-80 43	
Cook County North Riverside, IL Oregon, IL Northbrook,, IL Ottawa, IL					Adopted IPCB standards by reference Adopted IPCB standards by reference Adopted IPCB standards by reference Adopted IPCB standards by reference Adopted IPCB standards by reference
Chicago, IL	Nearest Adjacent	Any	55-70	55-70	Limit is 55 dB if source is 100 ft or farther. 70 dB if source is 10-100 ft away.
Mount Prospect, IL	Residential		20-58	20-58	
	Commercial		35-73	35-73	
North Riverside, IL	Residential		40-75	32-69	
*IPCB Limits	Business		45-80	45-80	
Wichita, KS		Residential	55	50	
*Noise cannot exceed background level by more than 5 dB		Commercial	60	55	Police, Health officers, representatives of Superintendent of Central Inspections. Fine not to exceed \$1000 and/or six months in jail.
		Light Industrial	70	65	
		Industrial	80	75	
Madison, WI	Low Residential	Low Residential	75	70	Police enforce, fines ranging from \$10 to \$500.
	High Residential	High Residential	75	75	
	Any Residential	Commercial	75	75	

Chabuta	Cound Management		dB Limits	Nicht	
Statute	Sound Measured On:	Sound Coming From:	Daytime	Night	Notes
Colorado Springs	Residential		55	50	Police enforce. Fines spelled out for car stereos and loud trucks, but not other sources.
	Commercial		60	55	
	Light Industrial		70	65	
	Industrial		80	75	
Travese City, MI	Residential		65	60	Noise Control Officer can order immediate halt to noise, issue fines of \$100-\$500 per day.
	Commercial		70	65	
	Industrial		75	70	
	"Noise Sensitive Are	eas"	*	*	Limit set per adopting ordinance
Austin, TX			55	45	Planned Developments Only

Chapter 16. Noise Ordinance.

Sec. 16-1. – Policy.
Sec. 16-2. – Definitions.
Sec. 16-3. – Loud and Raucous Noise Prohibited.
Sec. 16-4. – (reserved)
Sec. 16-5. – Exceptions.
Sec. 16-6. – (reserved)
Sec. 16-7. – Construction and Maintenance Noise.
Sec. 16-8. – Motor Vehicles and Vehicle Horns.
Sec. 16-9. – Mechanical Stationary Noise.
Sec. 16-10. – Noise Abatement and Remediation.

Section 16-1. – Policy.

It shall be the policy of the City of Urbana to discourage, reduce and, where reasonably feasible, require the mitigation of any noise, regardless of how generated, produced, or broadcasted, which is perceived by an individual of ordinary and reasonable sensibilities and sensitivities to be of such a level, duration, nature, or character as annoying, disturbing, injurious, harmful, dangerous, or otherwise unsafe.

Sec. 16-2. – Definitions.

"Boundary Line" shall mean and include the actual property line which constitutes the perimeter of a real estate parcel as defined by that parcel's legal description.

"City" shall mean the City of Urbana.

"Complainant" shall mean and include an individual of ordinary and reasonable sensibilities and sensitivities who reports any potential violation of this Chapter to the City of Urbana, or Police Chief of the City of Urbana, or their agent, where such agent determines that any sound may be a violation of this Chapter.

"Construction Equipment" shall mean any tool, device, or machine, whether motorized or nonmotorized, which is powered by combustion, electricity, or compressed gas and used for construction or property maintenance purposes. The term shall include, but not be limited to, graders, bulldozers, dump trucks, tractors, jack hammers, pumps, generators, nail guns, air compressors, lawn mowers, and leaf blowers. For the purposes of this definition, the term shall additionally include use of any hand-powered hammering.

"Loud and Raucous Noise" shall mean any noise which, because of its volume level, duration and/or character, would be reasonably deemed to annoy, disturb, injure or endanger the comfort, health, peace or safety of any Complainant. The term shall exclude those noises listed as exceptions in Section 16-5 hereof.

"Mechanical Stationary Noise" shall mean any Noise caused or produced by mechanical motion, including but not limited to harmonic, periodic, vibrational, oscillating, rolling, or rotary motion. For the

purposes of this definition, the term shall not include construction or maintenance-related noise prohibited by Section 16-7.

"Non-Residential Property" shall mean and include any real property which is used or which is intended for use by other than any Residence.

"Residence" shall mean any dwelling, dormitory, rooming house, or nursing home which is legally established and occupied per the Urbana Zoning Ordinance.

Sec. 16-3. – Loud and Raucous Noise Prohibited.

a. It shall be unlawful and a violation of this Ordinance for any person to generate, produce, create, broadcast, manufacture, maintain, or cause or facilitate the generation, production, creation, broadcast, manufacture, or maintenance of any Loud and Raucous Noise when such noise is audible from any:

- i. public street;
- ii. public park;
- iii. school, whether public or private, or upon the grounds of any such school;
- iv. publicly-owned building or upon the grounds of any publicly owned building;
- v. religious house of worship, affiliated building associated with any such religious house of worship, or the grounds of any religious house of worship or affiliated building associated with any such religious house of worship;
- vi. hospital, clinic, surgical center or the grounds of any such entity unless necessary for the direct provision of patient;
- vii. parking lot, whether public or private; or
- viii. Residence.

Section 16-4 (Reserved)

Sec. 16-5. – Exceptions.

The term "Loud and Raucous Noise" shall not be deemed to include or apply to any noise which is produced, generated, manufactured, or broadcasted by:

a. Cries or loud calls for emergency assistance or of warning;

b. Radios, sirens, horns, or bells which emanate from police, fire, ambulance, or other emergency response vehicles;

c. Special events such as parades, races, fireworks displays, and block parties for which the City of Urbana has issued a Special Events Permit, as well as sidewalk cafes licensed pursuant to City Council approval, so long as the aforesaid are conducted pursuant to the conditions of the permit or license and all City ordinances.

d. Activities on or in municipal and school athletic facilities and on or in publicly owned property and facilities provided that such activities have been authorized by the owner or operator of such municipal or school property;

e. Fire alarms and security alarms prior to the giving of notice and a reasonable opportunity for the owner or tenant of the premises, police department, fire department, or other first responders to turn-off or otherwise cancel the alarm or security system;

f. Religious worship activities including but not limited to the ringing of bells, the playing of musical instruments, the singing or chanting of choirs, or the singing or chanting of those in attendance at such worship activities;

- g. Clock towers, bell towers, and carillons;
- h. Rail locomotives and other railroad equipment;
- i. Aircraft;
- j. Generators and pumps used to relieve an emergency situations such as electrical power outages or flooding of buildings; or
- k. Mechanical Stationary Noise of less than 80 decibels.

Sec. 16-6. (reserved)

Sec. 16-7. - Construction and Maintenance Noise.

It shall be unlawful for any person to use any Construction Equipment to perform any construction or maintenance outside of any completely enclosed building at any time between the hours of 8:00 p.m. and 7:00 a.m. where such Construction Equipment is operated within six hundred (600) feet of any Residence, hospital, or place of worship, unless the use of such equipment or tools is necessary to address an emergency which, if left unaddressed, would cause or create harm, danger, or serious inconvenience to any person or property.

Sec. 16-8. – Motor Vehicles and Automobile Horns.

Notwithstanding anything to the contrary elsewhere in this Chapter:

a. It shall be unlawful for any person to operate any motor or engine of a motor vehicle which weighs in excess of four (4) tons gross weight for a consecutive period longer than two (2) minutes while such motor vehicle is standing on private property which is located within one hundred fifty (150) feet of any Residence_except where such vehicle:

- i. is standing within a completely enclosed structure;
- ii. is required to remain stationary due to weather or traffic conditions; or
- iii. is engaged in, addressing or responding to an emergency situation or condition.

b. It shall be unlawful for any person to operate or permit the operation of any sound amplification system in or on any motor vehicle which can be heard outside the vehicle from a distance of seventy-five (75) feet from the vehicle where such vehicle is located or operated on a public right of way unless such sound amplification is a necessary part of any response to or attendance of an emergency situation or condition.

- c. It shall be unlawful for a person to operate or permit the operation of a motor vehicle:
 - i. which is equipped with a siren, whistle, bell, or auditory signaling device unless such vehicle is an emergency vehicle or unless such device is present as part of an anti-theft or security device which cannot be activated except as a result of efforts to unlawful take, use or harm a motor vehicle;
 - ii. which is not equipped with a muffler and exhaust system in good working order and which is in operation at all times during the operation of the vehicle's motor or engine;
 - iii. which is equipped with an exhaust system which has been modified or otherwise altered so as to amplify or increase the sound level of the said vehicle's motor or engine beyond that sound which would otherwise be produced, generated or broadcasted should such vehicle be equipped with the exhaust system which the manufacturer of said vehicle would normally install in said vehicle; or
 - in such a manner and on any public right of way, street, or highway so as to cause that vehicle's tires to produce, generate or broadcast a squealing, screeching, or similar sound by reason of rapid acceleration of the said vehicle.

d. It shall be unlawful for any person to sound any horn or audible signal device of any motor vehicle of any kind while the vehicle is not in motion nor shall any such horn or audible signal device be sounded except otherwise provided by law. Notwithstanding the foregoing, it shall not be deemed a violation of this Section should a horn or audible signal device be sounded in connection with responding to or attendance at an emergency situation or condition.

e. This Section shall apply to motor vehicles which are defined or classified as such pursuant to the Illinois Vehicle Code as from time-to-time amended. However, this Ordinance shall not apply to motor vehicles which are engaged in interstate commerce.

f. The penalty for violating this Section shall be seven hundred fifty and no/hundredths dollars (\$750.00).

Sec. 16-9. – Mechanical Stationary Noise.

a. No person shall operate or permit the operation of any stationary equipment, device, or machine, whether located inside or outside a building structure, in such a manner so as to produce, generate, manufacture, or broadcast Mechanical Stationary Noise_at a decibel level greater than 55 decibels during the hours of 10:00 p.m. and 7:00 a.m., or greater than 60 decibels at any other time, when such decibel level is measured in the manner provided for in Section 16.9.d.

b. *Mechanical Stationary Noise Less than 80 decibels*. In the event that a sound condition which is deemed in violation of Section 16-9., whether or not any such violation ticket has been issued, exists for a period of three or more consecutive days, the owner or operator of the property on which such condition exists shall be given seven days in which to submit a plan of remediation to reduce the sound decibel level to below that which is provided in Sub-Section 16-9.a which plan shall provide that such remediation shall be undertaken and completed no later than thirty days from the date when the condition is brought to the attention of the owner or operator of the said premises by the Director of Public Works or his/her designee.

c. *Mechanical Stationary Noise Greater than 80 decibels*. Mechanical Stationary Noise greater than 80 decibels shall be deemed Loud and Raucous Noise. When Mechanical Stationary Noise is reasonably believed by the Police Chief of the City of Urbana, or their agent, to be greater than 80 decibels, the Police Chief, or their agent, may order immediate sound abatement without the need for a remediation plan.

d. *Mechanical Stationary Noise Measurement*. For determining whether a Mechanical Stationary Noise is to be deemed to constitute a violation of this Ordinance, a measurement of the decibel level of such sound shall be undertaken with a decibel meter set to A-weight and in the following manner:

The decibel level measurement of such sound shall be taken from any location within five (5) feet of the Boundary Line of the property on which the Mechanical Stationary Noise is located. If the decibel level of the measurement equals or exceeds the decibel level provided for in Section 16-9.a. of this Ordinance such sound shall be deemed a violation of this Ordinance.

e. *Enforcement and Fines.* The Director of Public Works or his/her agent shall have the authority to enforce the provisions of Section 16-9. The penalty for violating Section 16.9. shall be no more than two hundred and no/hundredths dollars (\$200.00) per offense. Each day during which a violation of Section 16-9. exists shall constitute a separate offense of Section 16.9.

Sect. 16-10. – Noise Abatement and Remediation.

a. Any noise in violation of the Chapter shall be declared a public hazard and it shall be the responsibility of the person identified herein to abate or remediate the violation within a reasonable time given the nature and manner by which the prohibited noise is produced.

b. *Persons Responsible for Noise Abatement.*

Presumption. The occupant of the property or Residence, or the agent of the occupant on which a prohibited noise takes place, shall be presumed to have permitted the noise to occur; this presumption may be rebutted by evidence of a bona fide effort to prevent a violation of this chapter.

Responsibility. The occupant of the property or Residence, or the agent of the occupant, who shall permit another person to create a noise or conduct a noise as prohibited in this Chapter shall be deemed responsible for the noise or activity to the same extent as the person creating the noise or conducting the activity and shall be subject to the same punishment.

Construction Equipment. Any person in charge of operating, ordering, directing or allowing the operation or maintenance of Construction Equipment creating a noise as prohibited in this chapter, shall be deemed guilty of violating this Chapter.

Sect. 16-11. – Legal Actions Unimpaired.

Nothing in this chapter shall be construed to impair any cause of action, or legal remedy therefor, or any person or the public for injury or damage arising from the emission or release into the atmosphere or ground from any source whatever of noise or earthshaking vibration in such place or manner, or at such levels, so as to constitute a common-law nuisance.

Chapter 2. The Conceptual Framework for an Industrial Code

The central concept behind industrial performance standards is that, so long as industrial enterprises can operate in a fashion that avoids the creation of various enumerated nuisances, they should be free to locate anywhere within an industrial zone. Common sense, of course, tells us that this will always be more difficult for some businesses than for others. But the idea behind performance standards is to offer firms the flexibility of achieving compliance with those standards in the best way they see fit, thus allowing even the "dirtiest" industries to demonstrate their creativity in redesigning their operations to meet the standards.

That concept sets the stage for new ways of thinking about how industries can minimize their impact on the environment in a number of areas, including toxics use reduction. But it is also important to review many of the more traditional areas of regulatory concern in performance standards. Not every ordinance will address itself to each item listed below, but these are areas of concern that this study has identified through the examination of a variety of ordinances. Later sections of this chapter will consider the issues of monitoring and enforcement, of staff and resource commitments, and of the new challenges involved with toxic chemicals.

PERFORMANCE STANDARD COMPONENTS Noise

Noise is the quintessential local environmental impact. It does not travel well; it has no staying power beyond that of its source; and it does not accumulate in the environment. Nonetheless, prolonged noise exposure is a serious threat to human health, resulting in high stress levels and impaired hearing. For this reason, noise is one of the few nuisances regulated in virtually every industrial performance standards ordinance.

Criteria. Noise is not simply a matter of loudness. In scientific terms, it is actually a composite of three criteria that determine its impact. Intensity is measured in decibels (dB) on a logarithmic scale. In other words, a sound of 60 dB will be 10 times louder than one of 50 dB, not merely 20 percent louder. Figure 4 indicates the typical decibel levels of common sounds. For municipal noise enforcement purposes, the A-weighting scale, which is weighted toward the higher frequencies to account for human ear responses to sound, is the most commonly used and recommended. Other scales that better measure cumulative noise exposure are primarily used for such facilities as airports. The use of the A-weighting scale is noted in the use of the abbreviation dBA.

Frequency is measured in hertz (Hz) and relates to the number of cycles per second of a sound wave. High frequencies within the human hearing range (approximately 100 Hz to 20,000 Hz) produce the "earsplitting" sensation associated with high-pitched tones. The concentration of a sound in a narrow frequency band, such as the whine of an incoming jet, is also more intensely felt than a mix of sounds across a wide range of frequencies.

Finally, duration simply refers to the length of time a sound lasts. This, too, has important and obvious consequences for human sensitivity. For instance, intermittent sounds are typically more annoying than steady ones, but the degree of discomfort depends greatly on the other two factors. In addition, very loud sounds do more hearing damage the longer they last. Time of day also matters. Nighttime noise is known to be more annoying than daytime noise, a factor that has caused the Federal Aviation Administration to adopt a weighted measurement scheme for aircraft noise labeled Ldn (level day-night), which adds 10 dB to evening noise in measuring cumulative impact. All three criteria must be considered in drafting meaningful noise regulations.

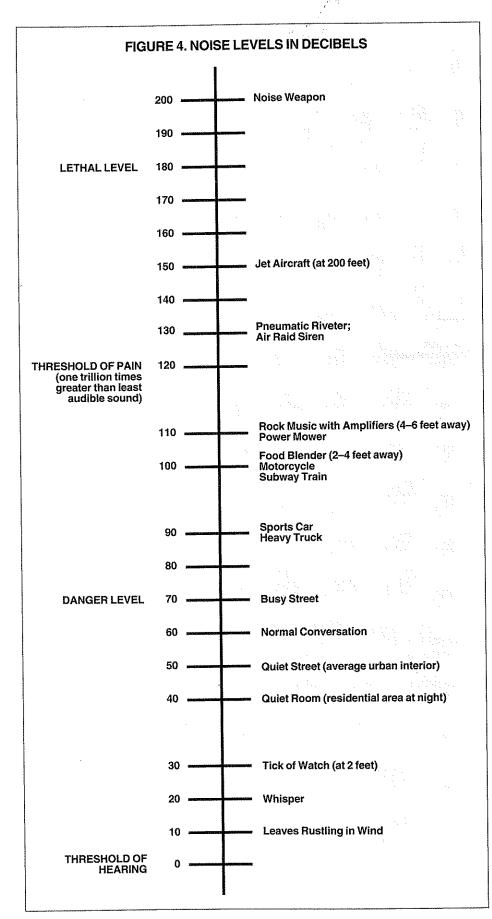
Regulation. As a practical matter, industrial noise has taken a back seat in recent years to other sources, including urban traffic, construction, and airport operations. Airplane noise is one of the few areas that has attracted ongoing attention from the federal government, largely because the problem cannot be solved strictly through local enforcement. The importance of these other sources, however, does not negate the need for good industrial regulations because the site-specific annoyances that an industrial operation can cause for its neighbors can be significant. In most of today's industrial settings, however, engineering solutions can abate the problem on a fairly permanent basis.

The important factor in establishing industrial noise regulations, as with almost all other industrial performance standards, is to be as specific as possible about what constitutes a violation. The quality of modern noise-measuring instrumentation leaves little excuse for vague standards, such as "audible at the property line." Such a definition relies too heavily on subjective judgment. The numbers in Table 1, drawn from typical ordinances, establish very clear guidelines for measurement and the verification of complaints. One

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EXHIBIT D



Source: A Guide to Noise Control at the Municipal Level in California, Stanford Environmental Law Society, January 1976, by Douglas E. Forrest, Robert F. Knox, and David C. Spielberg. note of caution: Some ordinances examined in this study, as well as others considered by the Rhode Island study, still use pre-1960 octave bands. These were removed from service in 1963 (*Industrial Performance Standards* 1992, 19). It would be better to bring these standards up to date.

Unfortunately, finding good research and models for such standards and definitions is not as easy as it once was. In the 1970s, the U.S. EPA supported noise control research and produced publications for use by municipalities developing noise policies. That program, however, was effectively disbanded under the Reagan administration. It remains to be seen whether it will be restored under the new Clinton administration.

Vibration

The nuisance factor associated with vibrations is fairly obvious. Excessive vibrations from industrial operations can disrupt the operations of neighboring facilities. Over a prolonged period, they can weaken structures. Although many ordinances simply prohibit perceptible vibrations at a facility's boundary line, this is another case where greater specificity makes an ordinance more enforceable. Table 2 lists some typical standards. Some communities also specify setbacks from the property line for heavy vibrating equipment. Maywood, Illinois, requires a 500-foot setback. This tends to ensure that the vibrations necessarily entailed in the operation of such machinery will be dissipated by distance.

Air Pollution

Air pollution is clearly an area where local regulation initially dominated the field before the advent of major state and federal legislation. In many areas, particularly California, municipalities still play a major role in regulating air quality. In some cases, cities may act as enforcement agents for the state, incorporating state air-quality standards by reference and

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EXHIBIT D

1. NOISE STANDARDS

Chicago, Illinois

Restricted Manufacturing Districts

Octave Band Cycles Per Second	Along Residence District Boundaries: Maximum Permitted Sound Level (Decibels)	Along Business District Boundaries: Maximum Permitted Sound Level (Decibels)
0 to 75	72	79
75 to 150	67	74
150 to 300	59	66
300 to 600	52	59
600 to 1200	46	53
1200 to 2400	40	47
2400 to 4800	34	41
above 4800	32	39

General Manufacturing Districts

Octave Band Cycles Per Second	Maximum Permitted Sound Level (Decibels) Along Residence District Boundaries or 125 feet from Plant or Operation Property Line	Maximum Permitted Sound Level (Decibels) Along Business District Boundaries or 125 feet from Plant or Operation Property Line
0 to 75	72	79
75 to 150	67	74
150 to 300	61	68
300 to 600	56	62
600 to 1200	50	56
1200 to 2400	45	51
2400 to 4800	41	47
above 4800	38	44

Heavy Manufacturing Districts

Octave Band Cycles Per Second	Maximum Permitted Sound Level (Decibels) Along Residence District Boundaries or 125 feet from Plant or Operation Property Line	Maximum Permitted Sound Level (Decibels) Along Business District Boundaries or 125 feet from Plant or Operation Property Line
0 to 75	75	80
75 to 150	70	75
150 to 300	65	70
300 to 600	59	64
600 to 1200	53	58
1200 to 2400	48	53
2400 to 4800	44	49
above 4800	41	46

Marwood, Illinois

Maximum Permitted Sound Level in Decibels along	
Boundaries or 125 ft. from Plant or Operation Property L	
Leaded of 125 ft. Iron Plant of Operation Property L	ine

...

Octave Band Cycles per Second	Residence Districts	Business Districts
0 to 75	67	73
75 to 150	62	68
150 to 300	58	64
300 to 600	54	60
600 to 1200	49	55
1200 to 2400	45	51
2400 to 4800	41	47
over 4800	37	47

Mount Prospect, Illinois

Sound Levels in Decibels

Octave Band Cycles per Second	All Residential Districts	All Business Districts
0 to 75	58	73
75 to 150	54	69
150 to 300	50	65
300 to 600	46	61
600 to 1200	40	55
1200 to 2400	33	43
2400 to 4800	26	41
over 4800	20	35

North Riverside, Illinois

Maximum Sound Emitted: Residential Daytime Maximum Octave Band Sound Pressure Levels (dB) of Sound Octave Band **Emitted to any Receiving Center Frequency Residence District from an** (Hertz) **O/R/A District** 31.5 75 63 74 125 69 250 64 500 58 1000 52 2000 47 4000 43 8000 40 Maximum Sound Emitted: Residential Nighttime Maximum Octave Band Sound Propouro Louolo (dD) +f

Octave Band Center Frequency (Hertz)	Ensure Levels (db) of sound Emitted to any Receiving Residence District from an O/R/A District
31.5	69
63	67
125	62
250	54
500	47
1000	41
2000	36
4000	32
8000	32

Maximum Sound Emitted: Business Districts

Maximum Sound Emitted. Dusiness Districts		
Octave Band Center Frequency (Hertz)	Maximum Octave Band Sound Pressure Levels (dB) of Sound Emitted to any Receiving Business District from an O/R/A District	
31.5	80	
63	79	
125	74	
250	69	
500	63	
1000	57	
2000	52	
4000	48	
8000	45	

Allowable dB (A) Sound Levels of Impulsive Sound Emitted from an O/R/A District to Designated Classes of Receiving Uses

O/R/A		Residence	
	Business	Daytime	Nighttime
57	61	56	46

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Hemdon, Virginia

Residence District Boundaries: In the IR District, at no point on or beyond the boundary of a residence district shall the sound pressure level resulting from any use, operation, or activity exceed the maximum permitted sound levels.

Preferred Frequencies

Center Frequency, Cycles per Second	Maximum Permitted Sound Pressure Level, Decibels
31.5	65
63	63
125	62
250	57
500	51
1,000	46
2,000	37
4,000	26
8,000	17

Pre-1960 Octave Bands

Octave Band Cycles per Second	Maximum Permitted Sound Pressure Level, Decibels
2075	67
75150	62
150300	57
300600	51
600-1,200	47
1,2002,400	39
2,400-4,800	29
4,800-10 KC	20

Lot Lines : In the IO District, at no point on or beyond the boundary of any lot shall the sound pressure level resulting from any use, operation, or activity exceed the maximum permitted decibel levels for the designated octave bands.

Preferred Frequencies

Center Frequency, Cycles per Second	Maximum Permitted Sound Pressure Level, Decibels
31.5	76
63	74
125	68
250	63
500	57
1,200	52
2,000	45
4,000	38
8,000	32
Pre-196	0 Octave Bands
Octave Band Cycles per Second	Maximum Permitted Sound Pressure Level, Decibels
00.76	76

Fieddule Level, Decidela
75
70
64
59
53
47
40
34

Standards in the IP District: In the IP District, at no point on or beyond the boundary of any residence or commercial district shall the sound pressure level resulting from any use, operation, or activity exceed the maximum permitted sound levels.

Preferred Frequencies

Center Frequency, Cycles per Second	Maximum Permitted Sound Pressure Level, Decibels
31.5	74
63	72
125	66
250	60
500	54
1,000	50
2,000	43
4,000	35
8,000	26

Pre-1960 Octave Bands

Octave Band Cycles per Second	Maximum Permitted Sound Pressure Level, Decibels
20-75	73
75–150	68
150-300	62
300600	56
6001,200	51
1,200-2,400	45
2,400-4,800	37
4,800-10 KC	28

Standards in the IG District: In the IG District, at no point on or beyond the boundary of a residence district shall the sound pressure level resulting from any use, operation, or activity exceed the maximum permitted sound levels.

Preferred Frequencies

Center Frequency, Cycles per Second	Maximum Permitted Sound Pressure Level, Decibels
31.5	82
63	73
125	63
250	58
500	53
1,000	48
2,000	44
4,000	42
8,000	39

Pre-1960 Octave Bands

Octave Band Cycles per Second	Maximum Permitted Sound Pressure Level, Decibels
20-75	76
75-150	66
150300	59
300600	54
600-1,200	49
1,200-2,400	45
2,400-4,800	43
4,800-10 KC	40

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TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE H: NOISE CHAPTER I: POLLUTION CONTROL BOARD

PART 901

SOUND EMISSION STANDARDS AND LIMITATIONS FOR PROPERTY LINE-NOISE-SOURCES

Section	
901.101	Classification of Land According to Use
901.102	Sound Emitted to Class A Land
901.103	Sound Emitted to Class B Land
901.104	Highly - Impulsive Sound
901.105	Impact Forging Operations
901.106	Prominent Discrete Tones
901.107	Exceptions
901.108	Compliance Dates for Part 901
901.109	Highly - Impulsive Sound from Explosive Blasting
901.110	Amforge Operational Level
901.111	Modern Drop Forge Operational Level
901.112	Wyman-Gordon Operational Level
901.113	Wagner Casting Site-Specific Operational Level (Repealed)
901.114	Moline Forge Operational Level
901.115	Cornell Forge Hampshire Division Site-Specific Operational Level
901.116	Forgings and Stampings, Inc. Operational Level
901.117	Rockford Drop Forge Company Operational Level
901.118	Scot Forge Company – Franklin Park Division Operational Level
901.119	Clifford-Jacobs Operational Level
901.120	C.S. Norcross Operational Level
901.121	Vaughan & Bushnell Operational Level
901.122	Ameren Elgin Facility Site-Specific Noise Emission Limitations
901.APPENDIX	Old Rule Numbers Referenced
А	
901.APPENDIX	Land-Based Classification Standards and Corresponding 35 Ill. Adm.
В	Code 901 Land Classes

AUTHORITY: Implementing Section 25 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/25 and 27].

SOURCE: Originally filed as Part 2 of Chapter 8: Noise Pollution, effective August 10, 1973; amended at 2 III. Reg. 27, p. 223, effective June 26, 1978; amended at 5 III. Reg. 6371, effective June 1, 1981; amended at 5 III. Reg. 8533, effective August 10, 1981; amended at 6 III. Reg. 10960, effective September 1, 1982; codified at 7 III. Reg. 13646; amended at 7 III. Reg. 14519, effective October 17, 1983; amended in R83-35 at 8 III. Reg. 18893, effective September 25, 1984; amended in R83-33, 26, 29, 30 and R83-34 at 9 III. Reg. 1405, effective January 17, 1985; Section 901.105(f)(1), (2) and (3) recodified to Sections 901.110, 901.111 and 901.112 at 9 III. Reg. 7147; amended in R83-25, 31 and 32 at 9 III. Reg. 7149, effective May 7, 1985; amended in R83-7 at 11 III. Reg. 3136, effective January 28, 1987; amended in R04-11, at 28 III. Reg. 11910, effective July 30, 2004; amended in R03-9

at 30 Ill. Reg.5533, effective March 10, 2006; amended in R06-11 at 31 Ill. Reg. 1984, effective January 12, 2007.

Section 901.101 Classification of Land According to Use

- a) The land use classification system used for the purposes of applying numeric sound standards for this Part is based on the Land-Based Classification Standards (LBCS) (Jeer, Sanjay. 2001. Land-Based Classification Standards . Online, http://www.planning.org/LBCS. American Planning Association: Chicago, Illinois). The LBCS applicable to this Part is set forth in Appendix B.
- b) Class A land includes all land used as specified by LBCS Codes 1000 through 1340, 2410 through 2455, 5200 through 5230, 5500, 6100 through 6145, 6222, 6510 through 6530, 6568 through 6600.
- c) Class B land includes all land used as specified by LBCS Codes 2100 through 2336, 2500 through 2720, 3500 through 3600, 4220 through 4243, 5100 through 5160, 5300 through 5390, 5400, 6147, 6210 through 6221, 6300 through 6320, 6400 through 6430, 6560 through 6567, 6700 through 6830, 7100 through 7380.
- d) Class C land includes all land used as specified by LBCS Codes 3100 through 3440, 4120 through 4180, 4210 through 4212, 4300 through 4347, 7400 through 7450, 8000 through 8500, and 9100 through 9520.
- e) A parcel or tract of land used as specified by LBCS Code 9100, 9400, or 5500 when adjacent to Class B or C land may be classified similarly by action of a municipal government having zoning jurisdiction over such land. Notwithstanding any subsequent changes in actual land use, land so classified retains such B or C classification until the municipal government removes the classification adopted by it.

(Source: Amended at 30 Ill. Reg. 5533, effective March 10, 2006)

Section 901.102 Sound Emitted to Class A Land

a) Except as elsewhere provided in this Part, no person shall cause or allow the emission of sound during daytime hours from any property-line-noise-source located on any Class A, B or C land to any receiving Class A land which exceeds any allowable octave band sound pressure level specified in the following table, when measured at any point within such receiving Class A land, provided, however, that no measurement of sound pressure levels shall be made less than 25 feet from such property-line-noise-source.

Octave Band CenterAllowable Octave Band Sound Pressure Levels (dB) of SoundFrequency (Hertz)Emitted to any Receiving Class A Land from

Class C Land	Class B Land	Class A Land
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EXHIBIT E

31.5	75	72	72
63	74	71	71
125	69	65	65
250	64	57	57
500	58	51	51
1000	52	45	45
2000	47	39	39
4000	43	34	34
8000	40	32	32

b) Except as provided elsewhere in this Part, no person shall cause or allow the emission of sound during nighttime hours from any property-line-noise-source located on any Class A, B or C land to any receiving Class A land which exceeds any allowable octave band sound pressure level specified in the following table, when measured at any point within such receiving Class A land, provided, however, that no measurement of sound pressure levels shall be made less than 25 feet from such property-line-noise-source.

Octave Band Center	Allowable Octave Band Sound Pressure Levels (dB) of Sound
Frequency (Hertz)	Emitted to any Receiving Class A Land from

	Class C Land	Class B Land	Class A Land
31.5	69	63	63
63	67	61	61
125	62	55	55
250	54	47	47
500	47	40	40
1000	41	35	35
2000	36	30	30
4000	32	25	25
8000	32	25	25

(Source: Amended at 30 Ill. Reg. 5533, effective March 10, 2006)

Section 901.103 Sound Emitted to Class B Land

Except as provided elsewhere in this Part, no person shall cause or allow the emission of sound from any property-line-noise-source located on any Class A, B or C land to any receiving Class B land which exceeds any allowable octave band sound pressure level specified in the following table, when measured at any point within such receiving Class B land, provided, however, that no measurement of sound pressure levels shall be made less than 25 feet from such property-line-noise-source.

Octave Band Center Frequency (Hertz)	Allowable Octave Band Sound Pressure Levels (dB) of Sound Emitted to any Receiving Class B Land from				
	Class C Land	Class B Land	Class A Land		
31.5	80	79	72		

EXHIBIT E

63	79	78	71
125	74	72	65
250	69	64	57
500	63	58	51
1000	57	52	45
2000	52	46	39
4000	48	41	34
8000	45	39	32

(Source: Amended at 30 Ill. Reg. 5533, effective March 10, 2006)

Section 901.104 Highly-Impulsive Sound

Except as provided elsewhere in this Part, no person shall cause or allow the emission of highlyimpulsive sound from any property-line-noise-source located on any Class A, B, or C land to any receiving Class A or B land which exceeds the allowable A-weighted sound levels, measured with fast dynamic characteristic, specified in the following table when measured in accordance with the procedure of 35 III. Adm. Code 900.103 at any point within such receiving Class A or B land, provided, however, that no measurement of sound levels shall be made less than 25 feet from such property-linenoise-source.

Classification of		veighted Sound Levels i	
Land on which Property-Line	Impulsive Sol	and Emitted to Receivin	g Class A or B Land
Noise-Source: is			
Located			
	Class B Land	Class A Land	
		Daytime	Nighttime
Class A Land	47	47	37
Class B Land	54	47	37
Class C Land	58	53	43

(Source: Amended at 30 Ill. Reg. 5533, effective March 10, 2006)

Section 901.105 Impact Forging Operations

- a) For purposes of this Section, only the following are applicable:
 - 1) Daytime hours means any continuous 16-hour period between 6:00 a.m. and 11:00 p.m. local time; and
 - 2) Nighttime hours means those 8 hours between 10:00 p.m. and 7:00 a.m. which are not part of the 16 continuous daytime hours.
 - 3) The reference time for L_{eq} , as defined in 35 Ill. Adm. Code 900.101 is one hour.

- 4) New Impacting Forging Operation is that property-line-noise-source comprised of impact forging operation on which construction began after September 1, 1982.
- 5) Existing Impact Forging Operation is that property-line-noise-source comprised of impact forging operations which are in existence on September 1, 1982,
- Emission Limitations for New Impact Forging Operation. No impact forging operation shall cause or allow the emission of impulsive sound to any receiving Class A or B land which exceeds the allowable sound levels specified in the following table when measured at any point within such receiving land, provided however, that no measurement of sound levels shall be made less than 25 feet from such new impact forging operation's property-line.

Allowable Highly- Impulsive Sound Levels (L_{eq}) in Decibels Emitted To Class A or B Land from New Impact Forging Operation

Class B Land	and Class A Land	
59.5	Daytime 53.5	Nighttime 48.5

c) Limitations for Existing Impact Forging Operation

No existing impact forging operation shall cause or allow the emission of highlyimpulsive sound to any receiving Class A or B land which exceeds the allowable sound levels specified in the following table, when measured at any point within such receiving land, provided however, that no measurement of sound levels shall be made less than 25 feet from such existing impact forging operation's property-line, unless such forging operation is granted a permanent site specific allowable operational level pursuant to subsection (d).

Allowable Highly- Impulsive Sound Levels (L_{eq}) in Decibels Emitted To Class A or B Land from Existing Impact Forging Operation

Class B Land	Class B Land Class A Land	
	Daytime	Nighttime
64.5	58.5	53.5

- d) Site Specific Allowable Operational Level for Existing Impact Forging Operation
 - 1) An existing impact forging operation which does not comply with subsection (c) may seek a permanent site specific allowable operational level from the Board. A permanent site specific level is that level of operation allowed petitioner after

review and approval by the Board and after implementation of abatement measures, if any, approved by the Board.

- 2) Any existing impact forging operation seeking a permanent site specific operational level must submit as its petition the following:
 - A) The location of the petitioner, a description of the surrounding community, and a map locating the petitioner within the community;
 - B) A description of the petitioner's operations, the number and size of the petitioner's forging hammers, the current hours of hammer operation, the approximate number of forgings manufactured during each of the three prior calendar years and the approximate number of hammer blows used to manufacture the forgings.
 - C) A description of any existing sound abatement measure.
 - D) The sound levels in excess of those permitted by subsection (c) emitted by the petitioner into the community, in 5 decibel increments measured in L_{eq}, shown on the map of the community.
 - E) The number of residences exposed to sound levels in excess of those permitted by subsection (c);
 - F) A description of other significant sources of noise (mobile and stationary) and their location shown on the map of the community;
 - G) A description of the proposed operational level and proposed physical abatement measures, if any, a schedule for their implementation and their costs;
 - H) The predicted improvement in community sound levels as a result of implementation of the proposed abatement measures; and
 - I) A description of the economic and technical considerations which justify the permanent site specific allowable operational level sought by petitioner.
- e) Land Use Classifications Preserved

The land use classifications in effect within a one-mile radius of an existing impact forging operation on September 1, 1982 remains the applicable land use classification for enforcement of these rules against an existing forging operation and any future modification thereof, regardless of actual subsequent changes in land use unless such actual changes would impose less restrictive limitations on the impact forging operations.

f) Site-Specific Operational Levels

Each individual existing forging operation identified in Sections 901.110, 901.111 and 901.112 must comply with the site-specific operational level defined, or is otherwise subject to Section 901.105(c).

(Source: Amended at 30 Ill. Reg. 5533, effective March 10, 2006)

Section 901.106 Prominent Discrete Tones

- a) No person shall cause or allow the emission of any prominent discrete tone from any property-line-noise-source located on any Class A, B or C land to any receiving Class A, B or C land, provided, however, that no measurement of one-third octave band sound pressure levels shall be made less than 25 feet from such property-line source.
- b) This rule shall not apply to prominent discrete tones having a one-third octave band sound pressure level 10 or more dB below the allowable octave band sound pressure level specified in Sections 901.102 through 901.104 for the octave band which contains such one-third octave band. In the application of this sub-section, the applicable numeric standard for sound emitted from any existing property-line-noise-source to receiving Class A land, for both daytime and nighttime operations, is found in Section 901.102(a).

(Source: Amended at 30 Ill. Reg. 5533, effective March 10, 2006)

Section 901.107 Exceptions

- a) Sections 901.102 through 901.106 inclusive does not apply to sound emitted from land used as specified by LBCS Codes 1100, 6600 and 5500.
- b) Sections 901.102 through 901.106 inclusive does not apply to sound emitted from emergency warning devices and unregulated safety relief valves.
- Sections 901.102 through 901.106 inclusive does not apply to sound emitted from lawn care maintenance equipment and agricultural field machinery used during daytime hours. For the purposes of this sub-section, grain dryers operated off the farm are not considered agricultural field machinery.
- d) Sections 901.102 through 901.106 inclusive do not apply to sound emitted from equipment being used for construction.
- e) Section 901.102(b) do not apply to sound emitted from existing property-line-noisesources during nighttime hours, provided, however, that sound emitted from such existing property-line-noise-sources are governed during nighttime hours by the limits specified in Section 901.102.

- f) Sections 901.102 through 901.106 inclusive do not apply to the operation of any vehicle registered for highway use while such vehicle is being operated within any land used as specified by Section 901.101 in the course of ingress to or egress from a highway.
- g) Sections 901.102 through 901.106 inclusive do not apply to sound emitted from land used as specified by LBCS Codes 5130 and 5140 when used for automobile and motorcycle racing; and, any land used for contests, rallies, time trials, test runs or similar operations of any self-propelled device, and upon or by which any person is or may be transported or drawn, when such self-propelled device is actually being used for sport or recreation and is actually participating in an activity or event organized, regulated, and supervised under the sponsorship and sanction of a club, organization or corporation having national or statewide recognition; provided, however, that the exceptions granted in this subsection do not apply to any automobile and motorcycle race, contest, rally, time trial, test run or similar operation of any self-propelled device if such event is started between the hours of 10:30 p.m. to 7:00 a.m., local time weekdays, or between the hours of 11:00 p.m. and 7:00 a.m., local time, weekend days.
- h) Section 901.104 shall not apply to impulsive sound produced by explosive blasting activities conducted on any Class C land other than the land used as specified by LBCS Codes 8300 and 8500, but such operations shall be governed by Section 901.109.
- i) Part 901 shall not apply to impulsive sound produced by explosive blasting activities, which are:
 - Conducted on any Class C land used as specified by LBCS Codes 8300 and 8500; and
 - Regulated by the Department of Natural Resources in accordance with Section 6.5 of the Surface-Mined Land Conservation and Reclamation Act [225 ILCS 715/6.5] and Section 3.13 of the Surface Coal Mining Land Conservation and Reclamation Act [225 ILCS 720/3.13].
- j) Sections 901.102 through 901.106 inclusive do not apply to sound emitted from snowmobiles.

(Source: Amended at 30 Ill. Reg. 5533, effective March 10, 2006)

Section 901.108 Compliance Dates for Part 901

- a) Except as provided in subsections (g), (i), and (j), every owner or operator of a new property-line-noise-source must comply with the standards and limitations of this Part on and after August 10, 1973.
- b) Except as otherwise provided in this rule, every owner or operator of an existing property-line-noise-source must comply with the standards and limitations of this Part on and August 10, 1974.

- c) Every owner or operator of an existing property-line-noise-source who emits sound which exceeds any allowable octave band sound pressure level of Section 901.102 or 901.103 by 10 dB or more in any octave band with a center frequency of 31.5 Hertz, 63 Hertz or 125 Hertz must comply with the standards and limitations of this Part on and after February 10, 1975.
- d) Except as provided in subsections (g) and (h), every owner or operator of an existing property-line-noise-source required to comply with Section 901.104 must comply with the standards and limitations of this Part on and after February 10, 1975.
- e) Every owner or operator of an existing property-line-noise-source required to comply with Section 901.106 must comply with the standards and limitations of this Part on and after February 10, 1975.
- f) Every owner or operator of Class C land now and hereafter used as specified by LBCS Code 4120 will have until August 10, 1976 to bring the sound from railroad car coupling in compliance with Section 901.104.
- g) Existing impact forging operations as defined in Section 901.105 which do not seek permanent site specific allowable operational levels must comply with Section 901.105 by December 1, 1983. Those seeking permanent site specific allowable operational levels pursuant to Section 901.105(d) must comply as of the effective date of the site specific rule granted or denied.
- h) Every owner or operator of Class C land now or hereafter used as specified by LBCS Code 3310 must comply with the standards and limitations of this Part on August 10, 1975.
- i) Every owner or operator of Class C land now or hereafter used as specified by LBCS Code 5130 and 5140 when used for automobile and motorcycle racing must comply with the standards and limitations of this Part on February 10, 1976.

(Source: Amended at 30 Ill. Reg.5533, effective March 10, 2006)

Section 901.109 Highly-Impulsive Sound From Explosive Blasting

a) During the daytime hours that cover the period after sunrise and before sunset, no person shall cause or allow any explosive blasting conducted on any Class C land other than land used as specified by LBCS Codes 8300 and 8500 so as to allow the emission of sound to any receiving Class A or B land which exceeds the allowable outdoor C-weighted sound levels, measured with the slow dynamic characteristic, specified in the following table, when measured at any point, of reasonable interference with the use of such receiving Class A or B land.

Allowable Outdoor C-Weighted Sound Exposure Levels in Decibels of Explosive Blasting Sounds Emitted to Receiving Class A or B Land from Any Class C Land other than Land Used as Specified by LBCS Code 8300 or 8500

Receiving Class A LandReceiving Class B Land107112The allowable sound exposure level limits in the above table must be lowered by three
decibels (3 dB) for each doubling of the number of blasts during the day or night.

b) Compliance with outdoor peak sound pressure level limits in the following table shall constitute prima facie level limits of this rule when measured on such receiving Class A or B land.

Equivalent Maximum Sound Pressure Level (Peak) Limits in Decibels

Lower Frequency Limit of	Receiving Class A Land	Receiving Class B Land
Measuring System for Flat	(dB)	(dB)
Response, a Variation from		
Linear Response of + or -		
3dB (Hz)		
< 2.0 but > 0.1	133	133

- c) During the period defined by both the beginning of the nighttime hours (10:00 pm) or sunset, whichever occurs earlier, and the ending of the nighttime hours (7:00 am) or sunrise, whichever occurs later, the allowable sound level limits in subsections (a) and (b) must be reduced by 10 decibels except in emergency situations where rain, lightning, other atmospheric conditions, or operator or public safety requires unscheduled nighttime hour explosive blasting.
- d) Persons causing or allowing explosive blasting to be conducted on any Class C land other than land used as specified by LBCS Code 8300 or 8500 must notify the local public of such blasting prior to its occurrence, except when emergency situations require unscheduled blasting, by publication of a blasting schedule, identifying the work days or dates and time periods when explosives are expected to be detonated, at least every three months in a newspaper of general circulation in the locality of the blast site.

(Source: Amended at 30 Ill. Reg. 5533, effective March 10, 2006)

Section 901.110 Amforge Operational Level

Amforge Division of Rockwell International located at 119th Street, Chicago, Illinois must:

a) Operate only ten forging hammers at any one time;

- b) Operation of its forging hammers is limited to the hours of 7:00 a.m. through 11:00 p.m., with occasional operations beginning at 6:00 a.m. and ending at midnight, Monday through Saturdays; and
- c) Install sound absorptive materials on each of the forging hammer structures as each is routinely overhauled, but no later than January 1, 1987.

(Source: Amended at 30 Ill. Reg. 5533, effective March 10, 2006)

Section 901.111 Modern Drop Forge Operational Level

Modern Drop Forge Company located at 139th Street and Western Avenue in Blue Island, Illinois must:

- a) Operate only twenty-one forging hammers at any one time; and
- b) Operate its forging hammers only during the hours of 6:00 a.m. through midnight, Mondays through Fridays, and 6:30 a.m. until 7:30 p.m. on Saturdays.

(Source: Amended at 30 Ill. Reg. 5533, effective March 10, 2006)

Section 901.112 Wyman-Gordon Operational Level

Wyman-Gordon Company located at 147th Street and Wood Street, Harvey, Illinois shall:

- a) Operate only six forging hammer units, each consisting of two hammers, after January 1, 1984.
- b) Operate forging units in Buildings 6 and 7, located at the southern perimeter of the Wyman-Gordon Company's Harvey facility, to produce no more than 20% of the total annual hammer production at the Harvey facility;
- c) Operate forging units between the hours of 6:00 a.m. and midnight; limit forging operations on Saturdays and Sundays to no more than half a year's total; and limit forging operations during the hours of 6:00 a.m. and 7:00 a.m. and 11:00 p.m. and midnight to less than 2% of the Harvey's facility total annual hammer production; and
- d) Consolidate the two existing steel inventory yards at the one located north of Building 75 no later than January 1, 1984.

(Source: Recodified from Section 901.105(f)(3) at 9 Ill. Reg. 7147)

Section 901.113 Wagner Casting Site-Specific Operational Level (Repealed)

(Source: Repealed at 30 Ill. Reg.5533, effective March 10, 2006)

Section 901.114 Moline Forge Operational Level

Moline Forge and future owners of the forging facility located at 4101 Fourth Avenue, Moline, Illinois, shall comply with the following site-specific operational level:

- a) Operate no more than nine forging hammers at any one time; and
- b) Operate its forging hammers only between the hours of 6:00 a.m. until 11:00 p.m. Monday through Friday and from 6:00 a.m. until 3:30 p.m. on Saturdays.

(Source: Added at 9 Ill. Reg. 1405, effective January 17, 1985)

Section 901.115 Cornell Forge Hampshire Division Site-Specific Operational Level

Cornell Forge, Hampshire Division and future owners of the forging facility located at Walker Road, Hampshire, Illinois, shall comply with the following site-specific operational level:

- a) Operate no more than seven forging hammers at any one time; and
- b) Operate its forging hammers only on Monday through Saturday between the hours of 7:00 a.m. to 3:30 p.m. with an additional shift that may run from either 3:30 p.m. to 12:00 p.m. or from 10:30 p.m. to 7:00 a.m.

(Source: Added at 9 Ill. Reg. 1405, effective January 17, 1985)

Section 901.116 Forgings and Stampings, Inc. Operational Level

Forgings and Stampings, Inc. and future owners of the forging facility located at 1025 23rd Avenue, Rockford, Illinois, shall comply with the following site-specific operational level:

- a) Operate no more than six forging hammers at any one time; and
- b) Operate its forging hammers only between the hours of 6:00 a.m. and 6:00 p.m. Monday through Friday and 6:00 a.m. and 2:00 p.m. on Saturday.

(Source: Added at 9 Ill. Reg. 1405, effective January 17, 1985)

Section 901.117 Rockford Drop Forge Company Operational Level

Rockford Drop Forge Company and future owners of the forging facility located at 2031 Ninth Street, Rockford, Illinois, shall comply with the following site-specific operational level:

- a) Operate no more than twelve forging hammers at any one time; and
- b) Operate its forging hammers only between the hours of 6:00 a.m. and 10:00 p.m. Monday through Saturday.

(Source: Added at 9 Ill. Reg. 1405, effective January 17, 1985)

Section 901.118 Scot Forge Company – Franklin Park Division Operational Level

Scot Forge and future owners of the forging facility located at 9394 W. Belmont Avenue, Franklin Park, Illinois, must comply with the following site-specific operational level:

- a) Operate no more than seven forging hammers at any one time; and
- b) Operate its forging hammers only between the hours of 6:00 a.m. and 6:00 p.m. Monday through Saturday.

(Source: Amended at 30 Ill. Reg. 5533, effective March 10, 2006)

Section 901.119 Clifford-Jacobs Operational Level

Clifford-Jacobs Forging Company and future owners of the forging facility located at North Market Street, Champaign, Illinois, shall comply with the following site-specific operational level:

- a) Operate no more than fourteen hammers at any one time; and
- b) Operate its forging hammers only between the hours of 6:00 a.m. and 11:00 p.m. Monday through Saturday.

(Source: Added at 9 Ill. Reg. 7149, effective May 7, 1985)

Section 901.120 C.S. Norcross Operational Level

C.S. Norcross & Sons Company and future owners of the forging facility located at the intersection of Davis and Dean Streets, Bushnell, Illinois, shall comply with the following site-specific operational level:

- a) Operate no more than twelve forging hammers at any one time; and
- b) Operate its forging hammers only between the hours of 7:00 a.m. and 1:00 a.m. Monday through Saturday.

(Source: Added at 9 Ill. Reg. 7149, effective May 7, 1985)

Section 901.121 Vaughan & Bushnell Operational Level

Vaughan & Bushnell Manufacturing Company and the future owners of the forging facility located at the intersection of Davis and Main Streets, Bushnell, Illinois, must comply with the following site-specific operational level:

- a) Operate no more than ten hammers at any one time; and
- b) Vaughan & Bushnell may operate 24 hours per day, Monday through Sunday.

(Source: Amended at 31 Ill. Reg. 1984, effective January 12, 2007)

Section 901.122 Ameren Elgin Facility Site-Specific Noise Emission Limitations

The Combustion Turbine Power Generation Facility located at 1559 Gifford Road in Elgin, Illinois shall not cause or allow the emission of sound from any property-line-noise source located on that property which exceeds any allowable octave band sound pressure level specified in the following table, when measured at any point within the receiving Class A or Class B land.

Octave Band Center Frequency (Hertz)	Levels (dB) of S	Band Sound Pressure ound Emitted to any or Class B Land from
	Class A Land	Class B Land
31.5	80	80
63	74	79
125	69	74
250	64	69
500	58	63
1000	58	58
2000	58	58
4000	50	50
8000	40	45

(Source: Added at 28 Ill. Reg.11910, effective July 30, 2004)

Section 901.APPENDIX A Old Rule Numbers Referenced

The following table is provided to aid in referencing old Board rule numbers to section numbers pursuant to codification.

Rule 201	Section 901.101
Rule 202	Section 901.102(a)
Rule 203	Section 901.102(b)
Rule 204	Section 901.103
Rule 205	Repealed
Rule 205 (was old 206)	Section 901.104
Rule 206 (new rule)	Section 901.105
Rule 207	Section 901.106
Rule 208	Section 901.107
Rule 209	Section 901.108
Rule 210	Section 901.109
Added in Codification	Appendix A
Unnumbered Appendix to Chapter 8, Part 2	Appendix B

Section 901.APPENDIX B Land-Based Classification Standards and Corresponding 35 Ill. Adm. Code 901 Land Classes

LB	CS		
Main Category	Function Code	Description	35 IAC 901 Land Class

	1000	Residence or accommodation functions	Α
u	1100	Private household	
atic	1200	Housing services for the elderly	
pou	1210	Retirement housing services	
Residence or accommodation functions	1220	Congregate living services	
or accon functions	1230	Assisted-living services	
or a	1240	Life care or continuing care services	
fi fi	1250	Skilled-nursing services	
len	1300	Hotels, motels, or other accommodation services	
esic	1310	Bed and breakfast inn	
Å	1320	Rooming and boarding	
	1330	Hotel, motel, or tourist court	

LF	BCS		
Main Category	Function Code	Description	35 IAC 901 Land Class
	1340	Casino hotel	A
	2000	General sales or services	
	2100	Retail sales or service	В
	2110	Automobile sales or service establishment	
	2111	Car dealer	
	2112	Bus, truck, mobile homes, or large vehicles	
	2113	Bicycle, motorcycle, ATV, etc.	
	2114	Boat or marine craft dealer	
	2115	Parts, accessories, or tires	
	2116	Gasoline service	
	2120	Heavy consumer goods sales or service	
	2121	Furniture or home furnishings	
	2122	Hardware, home centers, etc.	
	2123	Lawn and garden supplies	
	2124	Department store, warehouse club or superstore	
ces	2125	Electronics and Appliances	
General sales or services	2126	Lumber yard and building materials	
r se	2127	Heating and plumbing equipment	
S 01	2130	Durable consumer goods sales and service	
ale	2131	Computer and software	
al s	2132	Camera and photographic supplies	
ner	2133	Clothing, jewelry, luggage, shoes, etc.	
Ge	2134	Sporting goods, toy and hobby, and musical instruments	
	2135	Books, magazines, music, stationery	
	2140	Consumer goods, other	
	2141	Florist	
	2142	Art dealers, supplies, sales and service	
	2143	Tobacco or tobacconist establishment	
	2144	Mail order or direct selling establishment	
	2145	Antique shops, flea markets, etc.	
	2150	Grocery, food, beverage, dairy, etc.	
	2151	Grocery store, supermarket, or bakery	
	2152	Convenience store	
	2153	Specialty food store	
	2154	Fruit and vegetable store	
	2155	Beer, wine, and liquor store	
	2160	Health and personal care	30

LBCS			
Main Category Function	Code	Description	35 IAC 901 Land Class
	2161	Pharmacy or drug store	
	2162	Cosmetic and beauty supplies	
	2163	Optical	
22	200	Finance and Insurance	
	2210	Bank, credit union, or savings institution	
	2220	Credit and finance establishment	
	2230	Investment banking, securities, and brokerages	
	2240	Insurance-related establishment	
	2250	Fund, trust, or other financial establishment	
23	300	Real estate, and rental and leasing	
	2310	Real estate services	
	2320	Property management services	
	2321	Commercial property-related	
	2322	Rental housing-related	
	2330	Rental and leasing	
	2331	Cars	
	2332	Leasing trucks, trailers, RVs, etc.	
	2333	Recreational goods rental	
	2334	Leasing commercial, industrial machinery, and equipment	
	2335	Consumer goods rental	
	2336	Intellectual property rental (video, music, software, etc.)	В
24	400	Business, professional, scientific, and technical services	
	2410	Professional services	Α
	2411	Legal services	
	2412	Accounting, tax, bookkeeping, payroll services	
	2413	Architectural, engineering, and related services	
	2414	Graphic, industrial, interior design services	
	2415	Consulting services (management, environmental, etc.)	
	2416	Research and development services (scientific, etc.)	
	2417	Advertising, media, and photography services	
	2418	Veterinary services	
	2420	Administrative services	
	2421	Office and administrative services	
	2422	Facilities support services	
	2423	Employment agency	
	2424	Business support services	
	2425	Collection agency	
	2430	Travel arrangement and reservation services	31

LF	BCS		
Main Category	Function Code	Description	35 IAC 901 Land Class
	2440	Investigation and security services	
	2450	Services to buildings and dwellings	
	2451	Extermination and pest control	
	2452	Janitorial	
	2453	Landscaping	
	2454	Carpet and upholstery cleaning	
	2455	Packing, crating, and convention and trade show services	Α
	2500	Food services	В
	2510	Full-service restaurant	
	2520	Cafeteria or limited service restaurant	
	2530	Snack or nonalcoholic bar	
	2540	Bar or drinking place	
	2550	Mobile food services	
	2560	Caterer	
	2570	Food service contractor	
	2580	Vending machine operator	_
	2600	Personal services	_
	2700	Pet and animal sales or service (except veterinary)	
	2710	Pet or pet supply store	
	2720	Animal and pet services	В
	3000	Manufacturing and wholesale trade	
	3100	Food, textiles, and related products	С
	3110	Food and beverages	
ade	3120	Tobacco manufacturing establishment	
e tra	3130	Textiles	
sale	3140	Leather and allied products	
lole	3200	Wood, paper, and printing products	
wb	3210	Wood products establishment	
and	3220	Paper and printing materials	
ng a	3230	Furniture and related products	
Manufacturing and wholesale trade	3300	Chemicals, and metals, machinery, and electronics manufacturing	
nuf	3310	Petroleum and coal products	
Ma	3320	Chemicals, plastics, and rubber products	
	3330	Nonmetallic mineral products	
	3340	Primary metal manufacturing	
	3350	Machinery manufacturing	

LB	BCS		
Main Category	Function Code	Description	35 IAC 901 Land Class
	3360	Electrical equipment, appliance, and components	
	2270	manufacturing	
	3370	Transportation equipment, automobiles, etc.	-
	3400	Miscellaneous manufacturing	
	3410	Jewelry and silverware	
	3420	Dolls, toys, games, and musical instruments	
	3430	Office supplies, inks, etc.	C
	3440	Signs Wholesale trade establishment	C B
	3500		В
	3510	Durable goods	
	3520	Nondurable goods	В
	3600	Warehouse and storage services	Б
	4000	Transportation, communication, information, and utilities	
	4100	Transportation services	
	4110	Air transportation	U
S	4111	Air passenger transportation	
litie	4112	Air freight transportation	
util	4113	Airport and support establishment	
nud	4114	Aircraft and accessories	
n, 8	4115	Other air transportation (including scenic, balloon, etc.)	U
atio	4120	Rail transportation	С
rm	4121	Rail passenger transportation	
nfo	4122	Rail freight transportation	
'n, i	4123	Rail transportation support establishment	
atic	4130	Road, ground passenger, and transit transportation	
nic	4131	Local transit systems-mixed mode	
nur	4132	Local transit systems-commuter rail	
ı, com	4133	Local transit systems-bus, special needs, and other motor vehicles	
tion	4134	Interurban, charter bus, and other similar establishments	
ortal	4135	School and employee bus transportation	
Transportation, communication, information, and utilities	4136	Special purpose transit transportation (including scenic, sightseeing, etc.)	
T ₁	4137	Taxi and limousine service	
	4138	Towing and other road and ground services	
	4140	Truck and freight transportation services	
	4141	General freight trucking, local	

LF	BCS		
Main Category	Function Code	Description	35 IAC 901 Land Class
	4142	General freight trucking, long-distance	
	4143	Freight trucking, specialized (used household and office goods)	
	4144	Freight trucking, specialized (except used goods)	
	4150	Marine and water transportation	
	4151	Marine passenger transportation	
	4152	Marine freight transportation	
	4153	Marine port and harbor operations	
	4154	Marine cargo handling and dry dock services	
	4155	Marine navigational and other services	
	4160	Courier and messenger services	
	4170	Postal services	
	4180	Pipeline transportation	С
	4200	Communications and information	
	4210	Publishing	С
	4211	Newspapers, books, periodicals, etc.	С
	4212	Software publisher	С
	4220	Motion pictures and sound recording	В
	4221	Motion picture and video production, publishing, and distribution	
	4222	Motion picture viewing and exhibition services	
	4223	Sound recording, production, publishing, and distribution	
	4230	Telecommunications and broadcasting	
	4231	Radio and television broadcasting	
	4232	Cable networks and distribution	
	4233	Wireless telecommunications	
	4234	Telephone and other wired telecommunications	
	4240	Information services and data processing industries	
	4241	Online information services	
	4242	Libraries and archives	
	4243	News syndicate	В
	4300	Utilities and utility services	C
	4310	Electric power	
	4311	Hydroelectric	
	4312	Fossil	
	4313	Nuclear	
	4314	Alternative energy sources	
	4320	Natural gas, petroleum, fuels, etc.	

LBCS			
Main Category	Function Code	Description	35 IAC 901 Land Class
	4330	Water, steam, air conditioning supply	
	4331	Drinking water	
	4332	Irrigation and industrial water supply	
	4333	Air conditioning and steam supply	
	4340	Sewer, solid waste, and related services	
	4341	Hazardous waste collection	
	4342	Hazardous waste treatment and disposal	
	4343	Solid waste collection	
	4344	Solid waste combustor or incinerator	
	4345	Solid waste landfill	
	4346	Waste treatment and disposal	
	4347	Septic tank and related services	
			С
	5000	Arts, entertainment, and recreation	T
	5100	Performing arts or supporting establishment	В
	5110	Theater, dance, or music establishment	
	5120	Sports team or club	
	5130	Racetrack establishment	
	5140	Promoter of performing arts, sports, and similar events	
	5150	Agent for management services	
recreation	5160	Independent artist, writer, or performer	В
rea	5200	Museums and other special purpose recreational institutions	Α
rec	5210	Museum	
nud	5220	Historical or archeological institution	
Arts, entertainment, and	5230	Zoos, botanical gardens, arboreta, etc.	A
mer	5300	Amusement, sports, or recreation establishment	В
ainı	5310	Amusement or theme park establishment	
tert	5320	Games arcade establishment	
ent	5330	Casino or gambling establishment	
rts,	5340	Miniature golf establishment	
A	5350	Skiing	
	5360	Marina or yachting club facility operators	
	5370	Fitness, recreational sports, gym, or athletic club,	
	5380	Bowling, billiards, pool, etc.	
	5390	Skating rinks, roller skates, etc.	
	5400	Camps, camping, and related establishments	B
	5500	Natural and other recreational parks	Α
L	_ !		

LBCS			
Main Category	Function Code	Description	35 IAC 901 Land Class
	6000	Education, public admin., health care, and other inst.	
	6100	Educational services	
	6110	Nursery and preschool	Α
	6120	Grade schools	
	6121	Elementary	
	6122	Middle	
	6123	Senior	
	6124	Continuance	
	6125	Alternate education services	
	6126	Adult education services	
:	6130	Colleges and universities	
inst	6140	Technical, trade, and other specialty schools	
ler	6141	Beauty schools	
oth	6142	Business management	
and	6143	Computer training	
e	6144	Driving education	
ca	6145	Fine and performing arts education	Α
alth	6146	Flight training	U
he	6147	Sports and recreation education	В
ublic admin., health care, and other inst.	6200	Public administration	
dm	6210	Legislative and executive functions	В
ic a	6220	Judicial functions	В
ldu	6221	Courts	В
Education, p	6222	Correctional institutions	Α
tior	6300	Other government functions	В
uca	6310	Military and national security	
Edi	6320	Space research and technology	
	6400	Public Safety	
	6410	Fire and rescue	
	6420	Police	
	6430	Emergency response	В
	6500	Health and human services	
	6510	Ambulatory or outpatient care services	Α
	6511	Clinics	
	6512	Family planning and outpatient care centers	
	6513	Medical and diagnostic laboratories	
	6514	Blood and organ banks	
	6520	Nursing, supervision, and other rehabilitative services	36

LB	BCS		
Main Category	Function Code	Description	35 IAC 901 Land Class
	6530	Hospital	Α
	6560	Social assistance, welfare, and charitable services	В
	6561	Child and youth services	
	6562	Child day care	
	6563	Community food services	
	6564	Emergency and relief services	
	6565	Other family services	
	6566	Services for elderly and disabled	
	6567	Veterans affairs	В
	6568	Vocational rehabilitation	Α
	6600	Religious institutions	Α
	6700	Death care services	В
	6710	Funeral homes and services	
	6720	Cremation services and cemeteries	
	6800	Associations, nonprofit organizations, etc.	
	6810	Labor and political organizations	
	6820	Business associations and professional membership organizations	
	6830	Civic, social, and fraternal organizations	В
	7000	Construction-related businesses	
	7100	Building, developing, and general contracting	В
	7110	Residential construction	
	7120	Land development and subdivision	
ses	7130	Industrial, commercial and institutional building construction	
nes	7200	Machinery related	
usi	7210	Building equipment and machinery installation contractors	
d b	7220	Excavation contractor	
late	7230	Water well drilling contractor	
I-Ite	7240	Wrecking and demolition establishment	
tion	7250	Structural steel erection contractor	
ruci	7300	Special trade contractor	
Construction-related businesses	7310	Carpentry, floor, and tile contractor	
Cc	7320	Concrete contractor	
	7330	Electrical contractor	
	7340	Glass and glazing contractor	
	7350	Masonry and drywall contractors	
	7360	Painting and wall covering	37

LBCS			
Main Category	Function Code	Description	35 IAC 901 Land Class
	7370	Plumbing, heating, and air-conditioning	
	7380	Roofing, siding, and sheet metal contractors	В
	7400	Heavy construction	С
	7410	Highway and street construction;	
	7420	Bridge and tunnel construction	
	7430	Water, sewer, and pipeline construction	
	7440	Power lines, communication and transmission lines	
	7450	Industrial and other nonbuilding construction	С
	8000	Mining and extraction establishments	С
1 nts	8100	Oil and natural gas	
and ion	8200	Metals (iron, copper, etc.)	
ing act ishi	8300	Coal	
Mining and extraction establishments	8400	Nonmetallic mining	
N est	8500	Quarrying and stone cutting establishment	С
	0000	A suissilians for stars fishing and heading	
	9000	Agriculture, forestry, fishing and hunting	0
	9100	Crop production	С
	9110	Grain and oilseed	
	9111	Wheat	
ng	9112	Corn Rice	
hunting	9113 9114	Soybean and oilseed	
	9114 9115	Dry pea and bean	
an	9113 9120	Vegetable farming or growing services	
ing	9130	Fruits and trees	
fish	9140	Greenhouse, nursery, and floriculture	
ry,	9140	Food crops grown under cover	
Agriculture, forestry, fishing and	9142	Nursery and tree production	
, foi	9143	Floriculture production	
ure,	9150	All other crops	
cult	9151	Tobacco crop	
gric	9152	Cotton crop	
Ā	9153	Sugarcane crop	
	9154	Hay	
	9155	Peanut crop	
	9200	Support functions for agriculture	
	9210		

LB	SCS		
Main Category	Function Code	Description	35 IAC 901 Land Class
	9220	Spraying, dusting, and other related services	
	9230	Crop harvesting and post harvest crop activities (including	
		drying, siloing, etc.)	
	9240	Cotton ginning, grist milling, etc.	-
	9300	Animal production including slaughter	
	9310	Cattle ranch and crops	
	9311	Beef cattle ranch establishments	
	9312	Cattle feedlot establishment	
	9320	Dairy cattle and milk production	
	9330	Hog and pig farm	
	9340	Poultry and egg production and hatcheries	
	9350	Sheep and goat farming establishments	
	9360	Fish hatcheries, fisheries, and aquaculture	
	9370	All other animal production	
	9371	Apiculture (bees, wax, and related operations)	
	9372	Horse and equine production	
	9373	Fur-bearing animal production	
	9380	Support functions for animal production	-
	9400	Forestry and Logging	
	9410	Logging	
	9420	Forest nurseries	
	9430	Support functions for forestry	-
	9500	Fishing, hunting and trapping, game preserves	
	9510	Fishing	
	9520	Hunting and trapping, game retreats, game and fishing	С
	0000	preserves	T
	9900	Unclassifiable function	U
	9910	Not applicable to this dimension	
	9990	To be determined	TT
	9999	To be determined	U

(Source: Amended at 30 Ill. Reg.5533, effective March 10, 2006)