

MINNESOTA NOISE REGULATIONS



07/15/86

CHAPTER 7010

MINNESOTA POLLUTION CONTROL AGENCY

AIR QUALITY DIVISION

NOISE POLLUTION CONTROL RULES

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7010.0010 INCORPORATION BY REFERENCE.

For the purpose of chapter 7010, American National Standards Institute, Specification for Sound Level Meters, S1.4-1983 is incorporated by reference. This publication is available from the American National Standards Institute, 1430 Broadway, New York, New York 10018 and can be found at: the offices of the Minnesota Pollution Control Agency, 520 Lafayette Road North, Saint Paul, Minnesota 55155; the Government Documents Section, Room 409, Wilson Library, University of Minnesota, 309 19th Avenue South, Minneapolis, Minnesota 55454; and the State of Minnesota Law Library, Ford Building, 117 University Avenue, Saint Paul, Minnesota 55155. This document is not subject to frequent change.

The Federal Highway Administration publication, Sound Procedures for Measuring Highway Noise: Final Report, FHWA-DP-45-1R (August 1981) is incorporated by reference. This publication is available from the United States Department of Transportation, Federal Highway Administration, 1000 North Globe Road, Arlington, Virginia 22201 and can be found at: the offices of the Minnesota Pollution Control Agency, 520 Lafayette Road North, Saint Paul, Minnesota 55155; the Government Documents Section, Room 409, Wilson Library, University of Minnesota, 309 19th Avenue South, Minneapolis, Minnesota 55454; and the State of Minnesota Law Library, Ford Building, 117 University Avenue, Saint Paul, Minnesota 55155. This document is not subject to frequent change.

Statutory Authority: MS s 116.07 subds 2,4

7010.0020 DEFINITIONS.

Subpart 1. Application. The terms used in chapter 7010 have the meanings given them in this part.

Subp. 2. A-Weighted. "A-Weighted" means a specific weighting of the sound pressure level for the purpose of determining the human response to sound. The specific weighting characteristics and tolerances are those given in American National Standards Institute S1.4-1983, section 5.1.

Subp. 3. Daytime. "Daytime" means those hours from 7:00 a.m. to 10:00 p.m.

Subp. 4. dB(A). "dB(A)" means a unit of sound level expressed in decibels (dB) and A-weighted.

Subp. 5. Decibel. "Decibel" means a unit of sound pressure level, abbreviated as dB.

Subp. 6. Impulsive noise. "Impulsive noise" means either a single sound pressure peak (with either a rise time less than 200 milliseconds or total duration less than 200 milliseconds) or multiple sound pressure peaks (with either rise times less than 200 milliseconds or total duration less than 200 milliseconds) spaced at least by 200 millisecond pauses.

Subp. 7. L<sub>10</sub>. "L<sub>10</sub>" means the sound level, expressed in dB(A), which is exceeded ten percent of the time for a one hour survey, as measured by test procedures approved by the director.

Subp. 8. L<sub>50</sub>. "L<sub>50</sub>" means the sound level, expressed in dB(A), which is exceeded fifty percent of the time for a one hour survey, as measured by test procedures approved by the director.

Subp. 9. Municipality. "Municipality" means a county; a city; a town; a regional planning and development commission established under Minnesota Statutes, chapter 473; the metropolitan council; or other governmental subdivision of the state responsible by law for controlling or restricting land use within its jurisdiction.

Subp. 10. Nighttime. "Nighttime" means those hours from 10:00 p.m. to 7:00 a.m.

Subp. 11. Person. "Person" means any human being, any municipality or other governmental or political subdivision or other public department or agency, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agency, legal entity, other than a court of law, or any legal representative of the foregoing, but does not include the agency.

Subp. 12. Sound pressure level. "Sound pressure level", in decibels, means 20 times the logarithm to the base 10 of the ratio of the pressure to the reference pressure. The reference pressure shall be 20 micronewtons per square meter.

**Statutory Authority: MS s 116.07 subds 2,4**

**7010.0030 NOISE CONTROL REQUIREMENT.**

No person may violate the standards established in part 7010.0040, unless exempted by Minnesota Statutes, section 116.07, subdivision 2a. Any municipality having authority to regulate land use shall take all reasonable measures within its jurisdiction to prevent the establishment of land use activities listed in noise area classification (NAC) 1, 2, or 3 in any location where the standards established in part 7010.0040 will be violated immediately upon establishment of the land use.

Statutory Authority: MS s 116.07 subds 2,4

**7010.0040 NOISE STANDARDS.**

Subpart 1. Scope. These standards describe the limiting levels of sound established on the basis of present knowledge for the preservation of public health and welfare. These standards are consistent with speech, sleep, annoyance, and hearing conservation requirements for receivers within areas grouped according to land activities by the noise area classification (NAC) system established in part 7010.0050. However, these standards do not, by themselves, identify the limiting levels of impulsive noise needed for the preservation of public health and welfare. Noise standards in subpart 2 apply to all sources.

**Subp. 2. Noise standards.**

Noise Area Classification	Daytime		Nighttime	
	L <sub>50</sub>	L <sub>10</sub>	L <sub>50</sub>	L <sub>10</sub>
1	60	65	50	55
2	65	70	65	70
3	75	80	75	80

Statutory Authority: MS s 116.07 subds 2,4

**7010.0050 NOISE AREA CLASSIFICATION.**

Subpart 1. Applicability. The noise area classification is based on the land use activity at the location of the receiver and determines the noise standards applicable to that land use activity unless an exemption is applied under subpart 3.

Subp. 2. Noise area classification. The noise area classifications and the activities included in each classification are listed below:

Noise Area Classification 1 - Land Use Activities

Household Units (includes farm houses)	Medical/other health services
Group quarters	Religious activities
Residential hotels	Cultural activities and nature exhibitions
Mobile home parks or courts	Entertainment assembly
Transient lodging	Camping and picnicking areas (designated)
Other residential	Resorts and group camps
Motion picture production	Other cultural, entertainment, recreational activities
Correctional institutions	
Educational services	

Noise Area Classification 2 - Land Use Activities

Railroad terminals (passenger)	Retail trade - building materials
Railroad terminals (passenger and freight)	hardware
Rapid rail transit and street railway passenger terminals	farm equipment
Bus passenger terminals (intercity)	general merchandise
Bus passenger terminals (local)	food
Bus passenger terminals (intercity and local)	automotive & accessories
Other motor vehicle transportation	marine craft & accessories
Airport and flying field terminals (passenger)	aircraft & accessories
Airport and flying field terminals (passenger and freight)	apparel & accessories
Marine terminals (passenger)	furniture, home furnishings and equipment
Marine terminals (passenger and freight)	eating and drinking
Telegraph message centers	Other retail trade
Transportation services and arrangements	Finance, insurance, and real estate services
Wholesale trade	Personal services
Public assembly (except race tracks and entertainment assembly)	Business services
Recreational activities (except designated camping and picnicking areas)	Repair services
	Legal services
	Other professional services
	Contract construction services
	Governmental services (except correctional institutions)
	Miscellaneous services (except religious activities)
	Amusements (except fairgrounds and amusement parks)
	Parks
	Automobile parking

Noise Area Classification 3 - Land Use Activities

Food and kindred products	Marine craft transportation
- manufacturing	(except passenger and
Textile mill products	freight terminals)
- manufacturing	Highway and street right-of-way
Apparel and other finished	Communication (except
products made from fabrics,	telegraph message centers)
leather & similar materials	Utilities
- manufacturing	Other transportation,
Lumber and wood products	communication & utilities
(except furniture)	(except transportation
- manufacturing	services and arrangements)
Furniture and fixtures	Race tracks
- manufacturing	Fairgrounds and amusement parks
Paper and allied products	Agricultural
- manufacturing	Agricultural
Printing, publishing, and	and related activities
allied industries	Forestry activities and
Chemicals and allied products	related services
- manufacturing	(including commercial forest
Petroleum refining and	land, timber production, and
related industries	other related activities)
Rubber and miscellaneous	Fishing activities
plastic products	and related services
- manufacturing	Mining activities
Stone, clay, & glass products	and related services
- manufacturing	Other resource production
Primary metal industries	and extraction
Fabricated metal products	All other activities not
- manufacturing	otherwise listed
Professional, scientific, and	
controlling instruments;	
photographic & optical goods;	
watches and clocks	
- manufacturing	
Miscellaneous manufacturing	
(except motion picture	
production)	
Railroad, rapid transit,	
and street railway	
transportation (except	
passenger terminals)	
Motor vehicle transportation	
(except passenger terminals)	
Aircraft transportation	
(except passenger terminals)	

Noise Area Classification 4 - Land Use Activities

Undeveloped and unused land area  
(excluding noncommercial forest development)  
Noncommercial forest development  
Water areas  
Vacant floor area  
Under construction  
Other undeveloped land and water areas

Subp. 3. Exceptions. The noise area classification for a land use may be changed in the following ways if the applicable conditions are met.

A. The daytime standards for NAC-1 shall be applied to NAC-1 during the nighttime if the land use activity does not include overnight lodging.

B. The standards for a building in a NAC-2 shall be applied to a building in a NAC-1 if the following conditions are met:

- 1) the building is constructed in such a way that the exterior to interior sound level attenuation is at least 30 dB(A); and
- 2) the building has year-round climate control; and
- 3) the building has no areas or accommodations that are intended for outdoor activities.

C. The standards for a building in a NAC-3 shall be applied to a building in a NAC-1 if the following conditions are met:

- 1) the building is constructed in such a way that the exterior to interior sound level attenuation is at least 40 dB(A); and
- 2) the building has year-round climate control; and
- 3) the building has no areas or accommodations that are intended for outdoor activities.

D. The standards for a building in a NAC-3 shall be applied to a building in a NAC-2 if the following conditions are met:

- 1) the building is constructed in such a way that the exterior to interior sound level attenuation is at least 30 dB(A); and
- 2) the building has year-round climate control; and
- 3) the building has no areas or accommodations that are intended for outdoor activities.

Statutory Authority: MS s 116.07 subds 2,4

**7010.0060 MEASUREMENT METHODOLOGY.**

Subpart 1. Measurement location. Measurement of sound must be made at or within the applicable NAC at the point of human activity which is nearest to the noise source. All measurements shall be made outdoors.

Subp. 2. Equipment specifications. All sound level measuring devices must meet Type 0, I, II, or S specifications under American National Standards Institute S1.4-1983.

Subp. 3. Calibration. All sound level measuring devices must, at a minimum, be externally field calibrated before and after monitoring using a calibration device of known frequency and sound pressure level.

Subp. 4. Measurement procedures. The following procedures must be used to obtain representative sound level measurements:

A. Measurements must be made at least three feet off the ground or surface and away from natural or manmade structures which would prevent an accurate measurement.

B. Measurements must be made using the A-weighting and fast response characteristics of the sound measuring device as specified in American National Standards Institute S1.4-1983.

C. Measurements must not be made in sustained winds or in precipitation which results in a difference of less than ten decibels between the background noise level and the noise source being measured.

D. Measurements must be made using a microphone which is protected from ambient conditions which would prevent an accurate measurement.

Subp. 5. Data documentation. A summary sheet for all sound level measurements shall be completed and signed by the person making the measurements. At a minimum, the summary sheet shall include:

- A. date;
- B. time;
- C. location;
- D. noise source;
- E. wind speed and direction;
- F. temperature;
- G. humidity;
- H. make, model, and serial number of measuring equipment;
- I. field calibration results;
- J. monitored levels; and
- K. site sketch indicating noise source, measurement location, directions, distances, and obstructions.

**7010.0070 SOUND ATTENUATION MEASUREMENT METHODOLOGY.**

Subpart 1. Purpose. Sound level measurements made for assessing sound attenuation as specified in part 7010.0050, subpart 3, item B, C, or D, shall be made according to the requirements of this part.

Subp. 2. Equipment. The equipment shall meet the requirements specified in part 7010.0060, subpart 2.

Subp. 3. Calibration. The equipment must meet the calibration requirements specified in part 7010.0060, subpart 3.

Subp. 4. Measurement procedure. The measurement procedure described in FHWA-DP-45-1R, section 8 must be used for determination of the sound attenuation.

Subp. 5. Equivalent methods. Methods equivalent to those described in subpart 4 may be used provided they are approved by the director of the Minnesota Pollution Control Agency. The director shall approve an alternative method if the director finds that the method will produce representative data and results which are as reliable as the methods specified in subp 4.

**Statutory Authority: MS s 116.07 subds 2,4**

**7010.0080 VARIANCE.**

If, upon written application of the responsible person, the agency finds that by reason of exceptional circumstances strict conformity with any provisions of any noise rule would cause undue hardship, would be unreasonable, impractical, or not feasible under the circumstances, the agency may permit a variance upon the conditions and within the time limitations as it may prescribe for the prevention, control, or abatement of noise pollution in harmony with the intent of the state and any applicable federal laws.

**Statutory Authority: MS s 116.07 subds 2,4**

**REPEALER.**

Minnesota Rules, parts 7010.0100, 7010.0200, 7010.0300, 7010.0400, 7010.0500, 7010.0600, 7010.0700 are repealed.

NTP-2 TEST PROCEDURE  
MANUAL METHOD FOR  
THE MEASUREMENT OF NON-IMPULSIVE NOISE

The following test procedure has been approved by the Executive Director of the Minnesota Pollution Control Agency for the manual measurement of non-impulsive noise.

A. INSTRUMENTATION:

- 1) a sound level meter and microphone conforming to type 0, 1, 2, or S specifications under ANSI S1.4-1983;
- 2) a calibrator of known frequency and level;
- 3) a small screwdriver for sensitivity adjustment;
- 4) microphone windscreen;
- 5) noise survey form and sample sheet;
- 6) tripod (optional).

B. METEOROLOGY:

- 1) Measurements must not be made in sustained winds or in precipitation which results in a difference of less than ten decibels between the background noise level and the noise source being measured;
- 2) Temperature and/or humidity conditions must be within the equipment manufacturer's specifications.

C. LOCATION:

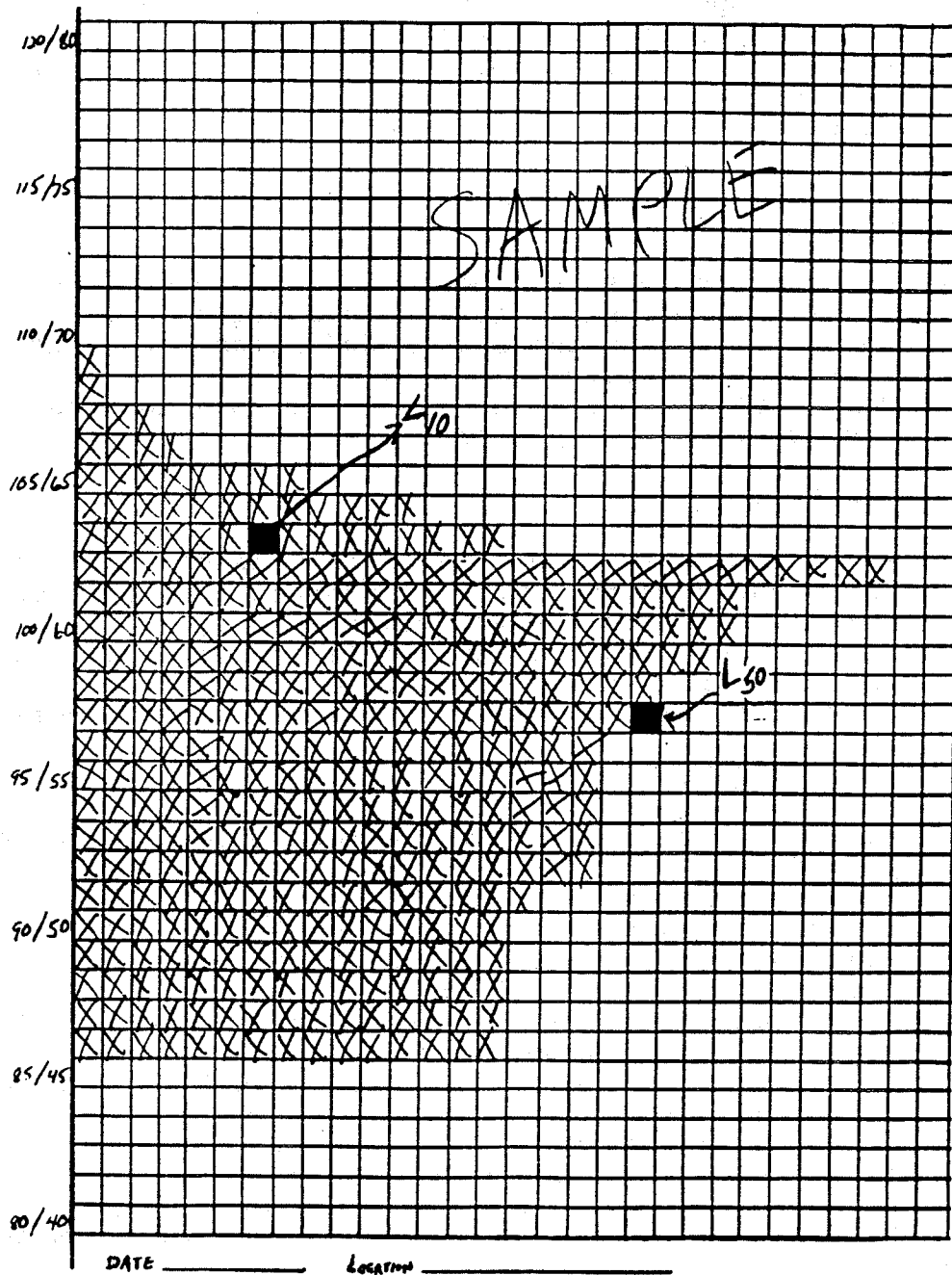
- 1) Measurements must be made at or within the applicable NAC at the point of human activity nearest the noise source;
- 2) Measurements must be made outdoors;
- 3) Measurements must be made at least three feet off the ground and away from natural or manmade structures which would prevent an accurate measurement (barriers, houses).

D. SURVEY PROCEDURE:

- 1) Monitoring must be conducted for at least a one hour time period;
- 2) Calibration must be performed before and after the monitoring period. Adjustments made if necessary;
- 3) Sound measuring devices must use the "A" weighting and FAST response characteristics;
- 4) Background noise must be at least ten decibels lower than the noise source being measured;
- 5) A Survey Form must be completed containing the date, time, location, noise source, wind speed/direction, temperature, humidity, equipment information (make, model, serial #), site sketch with the location of the noise source and measurement location (including appropriate distances), data and calibration information. A sample Survey Form is attached.

E. MANUAL MONITORING PROCEDURE;

- 1) Using a hand held sound level meter, take an instantaneous sound reading every ten seconds and record on a "sample sheet." An example of a "sample sheet" is attached;
- 2) Continue taking sound readings for one hour which will give you 360 individual readings;
- 3) To determine the L10, take the 36th loudest (10% of 360 = 36) individual sound reading by counting from the loudest to the quietest on the "sample sheet." In the example attached, the L10 = 63 and is the 36th X from the top of the sheet;
- 4) To determining the L50, take the 180th loudest (50% of 360 = 180) individual sound reading. In the example attached, the L50 = 57 and represents the 180th X from the top of the sheet.







NEW JERSEY NOISE REGULATIONS



NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

NEW JERSEY ADMINISTRATIVE CODE

TITLE 7, CHAPTER 29

SUBCHAPTER 1

NOISE CONTROL

Effective: January 18, 1974  
Revision Effective: March 18, 1985

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SUBCHAPTER I. GENERAL PROVISIONS

7:29-1.1 Definitions

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

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

1. Banking and other financial institutions;
2. Dining establishments;
3. Establishments for providing retail services;
4. Establishments for providing wholesale services;
5. Establishments for recreation and entertainment;
6. Office buildings;
7. Transportation;
8. Warehouses.

"Community service facility" means any non-residential facility used to provide services to the public, including but not limited to:

1. Club meeting halls, offices and facilities;
2. Organization offices and facilities;
3. Facilities for the support and practice of religion;
4. Private and parochial schools.

"Continuous airborne sound" means sound that is measured by the slow response setting of a sound level meter in accordance with the provisions of N.J.A.C. 7:29B-1.

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

"Decibel" means the practical unit of measurement for sound pressure level; the number of decibels of a measured sound is equal to 20 times the logarithm to the base 10 of the ratio of the sound pressure of the measured sound to the sound pressure of a standard sound (20 micropascals); abbreviated "dB."

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

"Frequency" means the number of sound pressure oscillations per second, expressed in hertz; abbreviated "Hz".

"Impulsive sound" means either a single pressure peak or a single burst (multiple pressure peaks) having a duration of less than one second.

"Industrial facility" means any activity and its related premises, property, facilities, or equipment involving the fabrication, manufacture, or production of durable or nondurable goods.

"Octave band sound pressure level" means the sound pressure level measured in decibels in standard octave bands with a sound level meter.

"Peak sound pressure level" means the maximum instantaneous sound pressure level measured by a sound level meter on the PEAK setting.

"Person" means any individual, public or private corporation, political subdivision, governmental agency, department or bureau of the State, municipality, industry, copartnership, or association.

"Public service facility" means any facility and its related premises, property, or equipment used to provide governmental services to the public including, but not limited to:

1. Maintenance centers;
2. Offices and buildings of agencies or instrumentalities of government;
3. Schools;
4. Waste collection centers;
5. Waste recycling centers;
6. Water and sewage facilities.

"Residential property" means property used for human habitation, including but not limited to:

1. Private property used for human habitation;
2. Commercial living accommodations and commercial property used for human habitation;
3. Recreational and entertainment property used for human habitation;
4. Community service property used for human habitation.

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

"Sound level meter" means an instrument used in accordance with the provisions of N.J.A.C. 7:29B-1 to measure sound pressure level, sound level, octave band sound pressure level, or peak sound pressure level, separately or in any combinations thereof.

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

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

7:29-1.2 Industrial, commercial, public service, or community service facilities.

(a) No person shall cause, suffer, allow, or permit sound from any industrial, commercial, public service, or community service facility that, when measured at any residential property line, is in excess of any of the following:

1. From 7:00 A.M. to 10:00 P.M.:
  - i. Continuous airborne sound which has a sound level in excess of 65 dBA; or

- ii. Continuous airborne sound which has an octave band sound pressure level in decibels which exceeds the values listed below in one or more octave bands:

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

; or

- iii. Impulsive sound in air which has a peak sound pressure level in excess of 80 decibels.

2. From 10:00 P.M. to 7:00 A.M.:

- i. Continuous airborne sound which has a sound level in excess of 50 dBA; or

- ii. Continuous airborne sound which has an octave band sound pressure level in decibels which exceeds the values listed below in one or more octave bands:

Octave Band Center Frequency (Hz)	Octave Band Sound Pressure Level (dB)
31.5	86
63	71
125	61
250	53
500	48
1000	45
2000	42
4000	40
8000	38

; or

- iii. Impulsive sound in air which has a peak sound pressure level in excess of 80 decibels.

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

1. Continuous airborne sound which has a sound level in excess of 65 dBA; or
2. Continuous airborne sound which has an octave band sound pressure level in decibels which exceeds the values listed below in one or more octave bands:

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

;or

3. Impulsive sound in air which has a peak sound pressure level in excess of 80 decibels.

#### 7:29-1.3 Stationary emergency signaling devices

(a) Testing of only the electromechanical functioning of a stationary emergency signaling device shall occur at the same time each day that a test is performed, but not before 8:00 A.M. or after 8:00 P.M. Any such testing shall only use the minimum cycle test time. Except as provided for in subsection (b) below, such test time shall not exceed ten seconds.

(b) Testing of the complete emergency signaling system including the electromechanical functioning of the signaling device and the personnel response to the signal shall not occur more than once in each calendar month. Such testing shall not occur before 8:00 A.M. or after 8:00 P.M. The ten second time limit on the electromechanical functioning of the signaling device shall not apply to such system testing.

(c) Stationary emergency signaling devices shall be used only for testing in compliance with applicable provisions of these regulations and for emergency purposes where personnel and equipment are mobilized.

7:29-1.4 Exceptions

(a) The operational performance standards established in this subchapter shall not apply to any of the following noise sources:

1. Agriculture;
2. Bells, chimes or carillons while being used in conjunction with religious services;
3. Emergency energy release devices;
4. Emergency work to provide electricity, water or other public utilities when public health or safety is involved;
5. Motor vehicle race tracks;
6. National Warning System (NAWAS): Systems used to warn the community of attack or imminent public danger such as flooding or explosion. These systems are controlled by the New Jersey Office of Emergency or Hazardous Spill Management, Division of State Police;
7. Noise of aircraft flight operations;
8. Public celebrations;
9. Public roadways;
10. Surface carriers engaged in commerce by railroad;
11. The unamplified human voice;
12. Use of explosive devices: These are regulated by the New Jersey Department of Labor under the 1960 Explosive Act (N.J.S.A. 21:1A-1 to 21:1A-144).

7:29-1.5 Performance test principle

For the purposes of measuring sound in accordance with the applicable provisions of these regulations, test equipment methods and procedures shall conform to the provisions of N.J.A.C. 7:29B-1.

OREGON NOISE REGULATIONS



OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Noise Control Regulations

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DEQ Offices

Noise Control Program Headquarters Office:

811 S. W. Sixth Avenue, Portland, OR 97204; Phone: 229-6085 or toll-free  
at 1-800-452-4011

Northwest Region Office:

811 S. W. Sixth Avenue, Portland, OR 97204; Phone: 229-5263  
Responsible for: Clackamas, Clatsop, Columbia, Lincoln, Multnomah,  
Tillamook, and Washington Counties

Willamette Valley Region Office:

895 Summer, N. E., Salem, OR 97310; Phone: 378-8240  
Responsible for: Benton, Lane, Linn, Marion, Polk, and Yamhill Counties

Southwest Region Office:

201 W. Main Street, Medford, OR 97501; Phone: 776-6010  
Responsible for: Jackson and Josephine Counties

Roseburg Branch Office:

1937 W. Harvard, Roseburg, OR 97470; Phone: 440-3338  
Responsible for: Douglas County

Coos Bay Branch:

490 N. Second, Coos Bay, OR 97420; Phone: 269-2721  
Responsible for: Coos and Curry Counties

Eastern Region Office:

700 S. E. Emigrant, Suite 330, Pendleton, OR 97801; Phone: 276-4063  
Responsible for: Baker, Gilliam, Grant, Malheur, Morrow, Umatilla, Union,  
Wallowa, and Wheeler Counties

Central Region Office:

2150 N. E. Studio Road, Bend, OR 97701; Phone: 388-6146  
Responsible for: Crook, Deschutes, Harney, Hood River, Jefferson, Klamath,  
Lake, Sherman, and Wasco Counties

DEPARTMENT OF ENVIRONMENTAL QUALITY  
CHAPTER 340, OREGON ADMINISTRATIVE RULES

DIVISION 35

NOISE CONTROL REGULATIONS

AMENDED APRIL 1983

General

Policy

340-35-005 In the interest of public health and welfare, and in accordance with ORS 467.010, it is declared to be the public policy of the State of Oregon:

(1) To provide a coordinated state-wide program of noise control to protect the health, safety, and welfare of Oregon citizens from the hazards and deterioration of the quality of life imposed by excessive noise emissions;

(2) To facilitate cooperation among units of state and local governments in establishing and supporting noise control programs consistent with the State program and to encourage the enforcement of viable local noise control regulations by the appropriate local jurisdiction;

(3) To develop a program for the control of excessive noise sources which shall be undertaken in a progressive manner, and each of its objectives shall be accomplished by cooperation among all parties concerned.

Exceptions

340-35-010 (1) Upon written request from the owner or controller of a noise source, the Department may authorize exceptions as specifically listed in these rules.

(2) In establishing exceptions, the Department shall consider the protection of health, safety, and welfare of Oregon citizens as well as the feasibility and cost of noise abatement, the past, present, and future patterns of land use; the relative timing of land use changes and other legal constraints. For those exceptions which it authorizes, the Department shall specify the times during which the noise rules can be exceeded and the quantity and quality of the noise generated, and when appropriate shall specify the increments of progress of the noise source toward meeting the noise rules.

Definitions

340-35-015 As used in this division:

(1) "Air Carrier Airport" means any airport that serves air carriers holding Certificates of Public Convenience and

Necessity issued by the Civil Aeronautic Board.

(2) "Airport Master Plan" means any long-term development plan for the airport established by the airport proprietor.

(3) "Airport Noise Abatement Program" means a Commission-approved program designed to achieve noise compatibility between an airport and its environs.

(4) "Airport Proprietor" means the person who holds title to an airport.

(5) "Ambient Noise" means the all-encompassing noise associated with a given environment, being usually a composite of sounds from any sources near and far.

(6) "Annual Average Day-Night Airport Noise Level" means the average, on an energy basis, of the daily Day-Night Airport Noise Level over a 12-month period.

(7) "Any one hour" means any period of 60 consecutive minutes during the 24-hour day.

(8) "Closed Course Motorcycle Racing Vehicle" means any motorcycle racing vehicle that is operated in competition or practice session on a closed course motor sports facility, i.e. where public access is restricted and admission is generally charged.

(9) "Commission" means the Environmental Quality Commission.

(10) "Construction" shall mean building or demolition work and shall include all activities thereto such as clearing of land, earthmoving, and landscaping, but shall not include the production of construction materials.

(11) "Day-Night Airport Noise Level (Ldn)" means the Equivalent Noise Level produced by airport/aircraft operations during a 24-hour time period, with a 10 decibel penalty applied to the level measured during the nighttime hours of 10 pm to 7 am.

(12) "Department" means the Department of Environmental Quality.

(13) "Director" means the Director of the Department.

(14) "Drag Racing Vehicle" means any racing vehicle used to compete in any acceleration competition initiated from a standing start and continued over a straight line course.

(15) "Emergency Equipment" means noise emitting devices required to avoid or reduce severity of accidents. Such equipment includes, but is not limited to, safety valves and other unregulated pressure relief devices.

(16) "Equivalent Noise Level (Leq)" means the equivalent steady state sound level in A-weighted decibels for a stated period of time which contains the same acoustic energy as the actual time-varying sound level for the same period of time.

(17) "Existing Industrial or Commercial Noise Source" means any Industrial or Commercial Noise Source for which installation or construction was commenced prior to January 1, 1975.

(18) "Farm Tractor" means any Motor Vehicle designed primarily for use in agricultural operations for drawing or operating plows, mowing machines, or other implements of husbandry.

(19) "Four Wheel Drive Racing Vehicle" means any four-wheeled racing vehicle with at least one wheel on the front and rear axle driven by the engine or any racing vehicle participating in an event with predominantly four wheel drive racing vehicles.

(20) "Go-Kart Racing Vehicle" means a light-weight four-wheeled racing vehicle of the type commonly known as a go-kart.

(21) "Impulse Sound" means either a single pressure peak or single burst (multiple pressure peaks) for a duration of less than one second as measured on a peak unweighted sound pressure measuring instrument or "C" weighted, slow response instrument and specified by dB and dBC respectively.

(22) "In-Use Motor Vehicle" means any Motor Vehicle which not a New Motor Vehicle.

(23) "Industrial or Commercial Noise Source" means that source of noise which generates Industrial or Commercial Noise Levels.

(24) "Industrial or Commercial Noise Levels" means those noises generated by a combination of equipment, facilities, operations, or activities employed in the production, storage, handling, sale, purchase, exchange, or maintenance of a product commodity, or service and those noise levels generated in the storage or disposal of waste products.

(25) "Motorboat" as used in OAR 340-35-025 means a watercraft propelled by an internal combustion engine but does not include a boat powered by an outboard motor or an inboard/outboard power package designed to exhaust beneath the surface of the water.

(26) "Motorcycle" means any Motor Vehicle, except Farm Tractors, designed to travel on not more than three wheels which are in contact with the ground.

(27) "Motor Sports Advisory Committee" means a committee appointed by the Director, from among the nominees, for the purpose of technical advice on racing activities and to recommend Exceptions to these rules as specified in OAR 340-35-040(12). This Committee shall consist of:

(a) One permanent public member nominated by a noise impacted group or association; and

(b) One representative of each of the racing vehicle types identified in OAR 340-35-040(2) as nominated by the respective sanctioning bodies; and

(c) The program manager of the Department's noise pollution control section who shall also serve as the departmental staff liaison to this body; and

- (d) An attorney; and
- (e) An acoustical engineer.
- (28) "Motor Sports Facility" means any facility, track or course upon which racing events are conducted.
- (29) "Motor Sports Facility Noise Impact Boundaries" means the daily 55 dBA day-night (Ldn) noise contours around the motor sports facility representing events that may occur on the day of maximum projected use.
- (30) "Motor Sports Facility Owner" means the owner or operator of a motor sports facility or an agent or designee of the owner or operator. When a Racing Event is held on public land, the event organizer (i.e., promoter) shall be considered the motor sports facility owner for the purposes of these rules.
- (31) "Motor Vehicle" means any vehicle which is, or is designed to be self-propelled or is designed or used for transporting persons or property. This definition excludes airplanes, but includes watercraft.
- (32) "New Airport" means any airport for which installation, construction, or expansion of a runway commenced after January 1, 1980.
- (33) "New Industrial or Commercial Noise Source" means any Industrial or Commercial Noise Source for which installation or construction was commenced after January 1, 1975 on a site not previously occupied by the industrial or commercial noise source in question.
- (34) "New Motor Sports Facility" is any permanent motor sport facility for which construction or installation was commenced after January 1, 1982. Any recreational park or similar facility which initiates sanctioned racing after this date shall be considered a motor sports facility.
- (35) "New Motor Vehicle" means a Motor Vehicle whose equitable legal title has never been transferred to a Person who in good faith purchases the New Motor Vehicle for purposes other than resale. The model year of such vehicle shall be the year so specified by the manufacturer, or if not so specified, the calendar year in which the new motor vehicle was manufactured.
- (36) "Noise Impact Boundary" means a contour around the airport any point on which is equal to the airport noise criterion.
- (37) "Noise Level" means weighted Sound Pressure Level measured by use of a metering characteristic with an "A" frequency weighting network and reported as dBA.
- (38) "Noise Sensitive Property" means real property normally for sleeping, or normally used as schools, churches, hospitals or public libraries. Property used in industrial or agricultural activities is not Noise Sensitive Property unless it meets the above criteria in more than an incidental manner.
- (39) "Octave Band Sound Pressure Level" means the sound pressure level for the sound being measured within the specified octave band. The reference pressure is 20 micropascals (20 micronewtons per square meter).

(40) "Off-Road Recreational Vehicle" means any Motor Vehicle including watercraft, used off Public Roads for recreational purposes. When a Road Vehicle is operated off-road, the vehicle be considered an Off-Road Recreational Vehicle if it is being off for recreational purposes.

(41) "One-Third Octave Band Sound Pressure Level" means the pressure level for the sound being measured within the specified third octave band at the Preferred Frequencies. The reference pressure is 20 micropascals (20 micronewtons per square meter).

(42) "Open Course Motorcycle Racing Vehicle" means any motorcycle racing vehicle that is operated in competition on an open course sports facility, i.e. where public access is not generally restricted. This definition is intended to include the several of motorcycles such as "enduro" and "cross country" that are used in events held in trail or other off-road environments.

(43) "Oval Course Racing Vehicle" means any racing vehicle motorcycle and not a sports car, which is operated upon a closed type motor sports facility.

(44) "Person" means the United States Government and agency thereof, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industrial partnership, association, firm, trust, estate, or any other legal entity whatever.

(45) "Practice Sessions" means any period of time during which racing vehicles are operated at a motor sports facility, other than during racing events. Driver training sessions or similar activities which are not held in anticipation of a subsequent racing event, which include only vehicles with a stock exhaust system, shall not be considered practice sessions.

(46) "Preferred Frequencies" means those mean frequencies in Hertz preferred for acoustical measurements which for this purpose shall consist of the following set of values: 20, 25, 31.5, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, 10,000, 12,500.

(47) "Previously Unused Industrial or Commercial Site" means property which has not been used by any industrial or commercial noise source during the 20 years immediately preceding commencement of construction of a new industrial or commercial source on that property. Agricultural activities and silvicultural activities generating infrequent noise emissions shall not be considered as industrial or commercial operations for the purpose of this definition.

(48) "Propulsion Noise" means that noise created in the propulsion of a Motor Vehicle. This includes, but is not limited to exhaust system noise, induction system noise, tire noise, cooling system noise, aerodynamic noise and where appropriate in the test procedure, braking system noise. This does not include noise created by Road Vehicle Auxiliary Equipment such as power take-offs and compressors.

(49) "Public Roads" means any street, alley, road, highway, freeway, thoroughfare, or section thereof in this state used by the public or dedicated or appropriated to public use.

(50) "Quiet Area" means any land or facility designated by the Commission as an appropriate area where the qualities of serenity, tranquility, and quiet are of extraordinary significance and serve an important public need, such as, without being limited to, a wilderness area, national park, state park, game reserve, wildlife breeding area or amphitheater. The Department shall submit areas suggested by the public as Quiet Areas, to the Commission, with the Department's recommendation.

(51) "Racing Event" means any time, speed or distance competition using motor vehicles conducted under a permit issued by the governmental authority having jurisdiction, or under the auspices of a recognized sanctioning body. This definition includes, but is not limited to, events on the surface of land and water. Any motor sports event not meeting this definition shall be subject to the ambient noise limits of OAR 340-35-030(1)(d).

(52) "Racing Vehicle" means any Motor Vehicle that is designed to be used exclusively in Racing Events or any New Motor Vehicle that has not been certified by its manufacturer as meeting the applicable noise limits of OAR 340-35-025 or any vehicle participating in or practicing for a Racing Event.

(53) "Recreational Park" means a facility open to the public for the operation of off-road recreational vehicles.

(54) "Road Vehicle" means any Motor Vehicle registered for use on Public Roads, including any attached trailing vehicles.

(55) "Road Vehicle Auxiliary Equipment" means those mechanical devices which are built in or attached to a Road Vehicle and are used primarily for the handling or storage of products in that Motor Vehicle. This includes, but is not limited to, refrigeration units, compressors, compactors, chippers, power lifts, mixers, pumps, blowers, and other mechanical devices.

(56) "Sound Pressure Level (SPL)" means 20 times the logarithm to the base 10 of the ratio of the root-mean-square pressure of the sound to the reference pressure. SPL is given in decibels (dB). The reference pressure is 20 micropascals (20 micronewtons per square meter).

(57) "Special Motor Racing Event" means any racing event in which a substantial or significant number of out-of-state racing vehicles are competing or any event which has a special significance to the community and which has been recommended as a special motor racing event by the motor sports advisory committee approved by the Department.

(58) "Sports Car Racing Vehicle" means any racing vehicle which meets the requirements and specifications of the competition rules of any sports car organization.

(59) "Statistical Noise Level" means the Noise Level which is equalled or exceeded a stated percentage of the time.

An  $L_{10} = 65$  dBA implies that in any hour of the day 65 dBA can be equalled or exceeded only 10 percent of the time, or for six minutes.

(60) "Stock Exhaust System" means an original equipment manufacturer exhaust system or a replacement for original equipment for a street legal vehicle whose noise emissions do not exceed those of the original equipment.

(61) "Temporary Autocross or Solo Course" means any area upon which a paved course motor sports facility is temporarily established. Typically such courses are placed on parking lots or other large paved areas, for periods of one or two days.

(62) "Top Fuel-Burning Drag Racing Vehicle" means a drag racing vehicle that operates using principally alcohol (more than 50 percent) or utilizes nitromethane as a component of its operating fuel and commonly known as top fuel and funny cars.

(63) "Trackside" means a sound measuring point of 50 feet from the racing vehicle and specified in Motor Race Vehicle and Facility Sound Measurement and Procedure Manual, NPCS-35.

(64) "Warning Device" means any device which signals an unsafe or potentially dangerous situation.

(65) "Watercraft Racing Vehicle" means any racing vehicle which is operated upon or immediately above the surface of water.

(66) "Well Maintained Muffler" means a device or combination of devices which effectively decreases the sound energy of internal combustion engine exhaust without a muffler by a minimum of 5 dBA at trackside. A well maintained muffler shall be free of defects or modifications that reduce its sound reduction capabilities. Each outlet of a multiple exhaust system shall comply with the requirements of this subsection, notwithstanding the total engine displacement versus muffler length requirements. Such a muffler shall be a:

(a) Reverse gas flow device incorporating a multitube and baffle design; or a

(b) Perforated straight core device, fully surrounded from beginning to end with a sound absorbing medium, not installed on a rotary engine, and:

(A) at least 20 inches in inner core length when installed on any drag race engine exceeding 1600 cc (96.7 cubic inches) displacement; or

(B) at least 12 inches in inner core length when installed on any non-motorcycle drag race engine equal to or less than 1600 cc (96.7 cubic inches) displacement; or

(C) at least 6 inches in inner core length and installed at the outlet end of any four-cycle motorcycle drag race engine

(D) at least 8 inches in inner core length when installed on any two-cycle motorcycle drag race engine; or an

(c) Annular swirl flow (auger-type) device of:

(A) at least 16 inches in swirl chamber length when installed on any drag race engine exceeding 1600 cc (96.7 cubic inches) displacement; or

- (B) at least 10 inches in swirl chamber length when installed on any drag race engine equal to or less than 1600 cc (96.7 cubic inches) displacement; or a
  - (d) Stacked 360° diffuser disc device; or a
  - (e) Turbocharger; or a
  - (f) Go-Kart muffler as defined by the International Karting Federation as specified in Motor Race Vehicle and Facility Sound Measurement and Procedure Manual, NPC-35; or an
  - (g) Original equipment manufacturer motorcycle muffler when installed on a motorcycle model such muffler was designated for by the manufacturer; or
  - (h) Boat motor whose exhaust exits beneath the water surface during operation; or a
  - (i) Formula Vee four-into-one header/collector when installed on a Formula Vee sports car racing vehicle; or a
  - (j) Hughes-type Racing muffler; or
  - (k) Any other device demonstrated effective and approved by the motor sports advisory committee and the Department.

Noise Control Regulations for the Sale of New Motor Vehicles

340-35-025 (1) Standards and Regulations:

- (a) No person shall sell or offer for sale any new motor vehicle designated in this section which produces a propulsion noise exceeding the noise limits specified in Table 1, except as otherwise provided in these rules.
- (b) Subsequent to the adoption of a Federal Environmental Protection Agency procedure to determine sound levels of passenger cars and light trucks, or a nationally accepted procedure for these vehicles not similar to those specified and approved under subsection (2)(a), the Department shall conduct an evaluation under such new procedure.
- (c) After an appropriate evaluation of noise emission data measured under the procedure specified under subsection (1)(b), the Department shall make recommendations to the Commission on the adequacy of the procedure and the necessity of amendments to this rule for incorporation of the procedure and associated standards.
- (d) No person shall sell or offer to sell any new motorcycle new motorcycle exhaust sytem or new motorcycle exhaust system component manufactured after January 1, 1983 unless the motorcycle exhaust sytem, or exhaust component is properly labeled or marked accordance with Federal noise regulations specified in Part 205 Subpart E of Title 40 of the Code of Federal Regulations.
- (2) Measurement:
  - (a) Sound measurements shall conform to test procedures adopted by the Commission in Motor Vehicle Sound Measurement Procedures Manual (NPCS-21), or to standard methods approved in writing by the Department. These measurements will generally

be carried out by the motor vehicle manufacturer on a sample of either prototype or production vehicles. A certification program shall be devised by the manufacturer and submitted to the Department for approval within 60 days after the adoption of this rule.

(b) Nothing in this section shall preclude the Department from conducting separate or additional noise level tests and measurements on new motor vehicles being offered for sale. Therefore, when requested by the Department, a new motor vehicle dealer or manufacturer shall cooperate in reasonable noise testing of a specific class of motor vehicle being offered for sale.

(3) Manufacturer's Certification:

(a) Prior to the sale or offer for sale of any new motor vehicle designated in Table 1, the manufacturer or a designated representative shall certify in writing to the Department that vehicles listed in Table 1 made by that manufacturer and offered for sale in the State of Oregon meet applicable noise limits. Such certification will include a statement by the manufacturer that:

(A) The manufacturer has tested sample or prototype vehicles.

(B) That such samples or prototypes met applicable noise limits when tested in accordance with the procedures specified

(C) That vehicles offered for sale in Oregon are substantially identical in construction to such samples or prototypes.

(b) Nothing in this section shall preclude the Department from obtaining specific noise measurement data gathered by the manufacturer on prototype or production vehicles for a class of vehicles for which the Department has reasonable grounds to believe is not in conformity with the applicable noise limits.

(4) Exceptions. Upon prior written request from the manufacturer or designated representative, the Department may authorize an exception to this noise rule for a class of motor vehicles, if it can be demonstrated to the Department that for that specific class a vehicle manufacturer has not had adequate lead-time or does not have the technical capability to either bring the motor vehicle noise into compliance or to conduct new motor vehicle noise tests.

(5) Exemptions:

(a) All racing vehicles, except racing motorcycles, and racing motorboats, shall be exempt from the requirements of this section provided that such vehicles are operated only at facilities used for sanctioned racing events.

(b) Racing motorcycles and racing motorboats shall be exempt from the requirements of this section provided that racing motorcycles are operated only at facilities used for sanctioned racing events, racing motorboats are operated only at areas designated by the State Marine Board for testing or at an approved racing event, and the following conditions are compl.

with:

(A) Prior to the sale of a racing motorcycle or racing motorboat, the prospective purchaser shall file a notarized affidavit with the Department, on a Departmentally approved form, stating that it is the intention of such prospective purchaser to operate the vehicle only at facilities used for sanctioned racing events; and

(B) No racing vehicle shall be displayed for sale in the State of Oregon without notice prominently affixed thereto:

(i) That such vehicle will be exempt from the requirements of this section only upon demonstration to the Department that the vehicle will be operated only at facilities used for sanctioned racing events; and

(ii) That a notarized affidavit will be required of the prospective purchaser stating that it is the intention of such prospective purchaser to operate the vehicle only at facilities used for sanctioned racing events; and

(C) No racing vehicle shall be locally advertised in the State of Oregon as being for sale without notice included:

(i) which is substantially similar to that required in (B)(i) and (B)(ii) above, and

(ii) Which is unambiguous as to which vehicle such notice applies.

#### Noise Control Regulations for In-Use Motor Vehicles

340-35-030 (1) Standards and Regulations:

(a) Road Vehicles

(A) No person shall operate any road vehicle which exceeds the noise level limits specified in Table 2 or in such a manner to exceed the noise level limits specified in Table 3, except as otherwise provided in these rules.

(B) No person shall operate a road vehicle with any of the following defects:

(i) No muffler

(ii) Leaks in the exhaust system

(iii) Pinched outlet pipe

(C) Non-conforming "classic" and other "special interest" vehicles may be granted an exception to this rule, pursuant to Rule 340-35-010, for the purpose of maintaining authentic equipment.

(b) Off-Road Recreational Vehicles.

(A) No person shall operate any off-road recreational vehicle which exceeds the stationary noise level limits specified Table 4 or in such a manner as to exceed the moving vehicle noise level limits specified in Table 4.

(B) No person shall operate an off-road recreational vehicle with any of the following defects:

(i) No muffler

(ii) Leaks in the exhaust system

(iii) Pinched outlet pipe

(c) Trucks Engaged in Interstate Commerce. Motor vehicles

with a GVWR or GCWR in excess of 10,000 pounds which are engaged in interstate commerce by trucking and are regulated by Part 202 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86. Stat. 1248, Public Law 92-574, shall be:

(A) Free from defects which adversely affect sound reduction;

(B) Equipped with a muffler or other noise dissipative device;

(C) Not equipped with any "cut-out" devices, "by-pass" devices, or any other similar devices; and

(D) Not equipped with any tire which as originally manufactured or newly retreaded having a tread pattern composed primarily of cavities in the tread, excluding sipes and local chunking, not vented by grooves to the tire shoulder or vented circumferentially to each other around the tire.

(d) Ambient Noise Limits.

(A) No person shall cause, allow, permit, or fail to control the operation of motor vehicles, including motorcycles, on property which he owns or controls, nor shall any person operate any such motor vehicle if the operation thereof increases the ambient noise level such that the appropriate noise level specified in Table 5 is exceeded as measured from either of the following points, if located within 1000 feet (305 meters) of the motor vehicle:

(i) Noise sensitive property, or

(ii) A quiet area.

(B) Exempt from the requirements of this subsection shall be:

(i) Motor vehicles operating in racing events;

(ii) Motor vehicles initially entering or leaving property which is more than 1000 feet (305 meters) from the nearest noise sensitive property or quiet area;

(iii) Motor vehicles operating on public roads; and

(iv) Motor vehicles operating off-road for non-recreational purposes.

(e) Auxiliary Equipment Noise Limits.

(A) No person shall operate any road vehicle auxiliary equipment which exceeds the noise limits specified in Table 6, as otherwise provided in these rules.

(B) No person shall cause, allow, permit, or fail to control the operation of any road vehicle auxiliary equipment that exceeds 50 dBA for more than 30 minutes between 10 p.m. and 7 a.m. at any appropriate noise sensitive property measurement as specified in OAR 340-35-035 (3)(b).

(f) Motorcycles manufactured after December 31, 1982 to Federal Noise Regulations (40 CFR Part 205):

(A) No person shall remove or render inoperative, or cause to be removed or rendered inoperative, other than for the purpose of maintenance, repair, or replacement of any device or element of incorporated in the motorcycle for the purpose of noise control

(B) No person shall remove or deface any noise label or mark required by Federal law which is affixed to any motorcycle or motorcycle part for purposes of identifying the motorcycle or motorcycle part as a federally regulated product.

(C) No person shall operate any road or off-road motorcycle manufactured to federal noise law that does not bear a label or mark on the exhaust system that matches the model specific code of the motorcycle on which the system is installed.

(D) No person shall operate, nor shall any person cause, all permit or fail to control the operation of any competition motorcycle identified for "competition use only" by the noise label or mark required by federal law on any property other than a motor sports facility in a practice session or a racing event.

(E) No person shall operate, nor shall any person cause, all permit or fail to control the operation of any motorcycle fitted with exhaust system or exhaust system component identified for "competition motorcycles only" by the noise label or mark required by federal law on any property other than a motor sports facility in a practice session or a racing event.

(2) Measurement. Sound measurement shall conform to test procedures adopted by the Commission in Sound Measurement Procedures Manual (NPCS-1) and Motor Vehicle Sound Measurement Procedures Manual (NPCS-21) or to standard methods approved in writing by the Department.

(3) Exemptions:

(a) Motor Vehicles registered as antique or historical motor vehicles licensed in accordance with ORS 481.205(4) are exempt from these regulations.

(b) Motor vehicle warning devices are exempt from these regulations.

(c) Vehicles equipped with at least two snowtread tires are exempt from the noise limits of Table 3.

(d) Motor vehicles described in subsection (1)(c), which are demonstrated by the operator to be in compliance with the noise levels in Table 3, for operation greater than 35 mph, are exempt from these regulations.

(e) Auxiliary equipment operated on construction sites or in the maintenance of capital equipment or to avoid or reduce the severity of accidents or operated on a farm for agricultural purpose or operated on forest land as defined in Subsection (1) of ORS 526 for activities related to the growing or harvesting of forest tree species are exempt from these regulations.

(4) Equivalency:

(a) The in-use motor vehicle standards specified in Table 2 and Table 3 have been determined by the Department to be substantially equivalent to the 25 foot stationary test standards set forth in Oregon Laws Chapter 273 (ORS 483.449).

(b) Tests shall be conducted according to the procedures in Motor Vehicle Sound Measurement Procedures Manual (NPCS-21) or to standard methods approved in writing by the Department.

Noise Control Regulations for Industry and Commerce

340-35-035 (1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this section, exceed the levels specified in Table 7, except as otherwise provided in these rules.

(b) New Noise Sources.

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source as measured at an appropriate measurement point, specified in subsection (3)(b) of this section, exceed the levels specified in Table 8, except as otherwise provided in these rules.

(B) New Sources Located on Previously Unused Site.

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels  $L_{10}$  or  $L_{50}$ , by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule.

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source, including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsection (5)(b), (5)(c), (5)(d), (5)(e), (5)(f), (5)(j), (5)(k) of this rule, shall not be excluded from this ambient measurement.

(c) Quiet Areas. No person owning or controlling an industrial or commercial noise source located either within the boundaries of a Quiet Area or outside its boundaries shall cause or permit the operation of that noise source if the statistical noise levels generated by that source exceed the levels specified in Table 9 as measured within the Quiet Area and not less than 400 feet (122 meters) from the noise source.

(d) Impulse Sound. Notwithstanding the noise rules in Tables 7 through 9, no person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if an impulsive sound is emitted in air by that source which exceeds the sound pressure levels specified below, as measured at an appropriate measurement point, as specified

in subsection (3)(b) of this rule:

(A) Blasting. 98 dBC, slow response, between the hours of 7 am and 10 pm and 93 dBC, slow response, between the hours of 10 pm and 7 am.

(B) All Other Impulse Sounds. 100 db, peak response, between the hours of 7 am and 10 pm and 80 dB, peak response, between the hours of 10 pm and 7 am.

(f) Octave Bands and Audible Discrete Tones. When the Director has reasonable cause to believe that the requirements of subsections (1)(a), (1)(b), or (1)(c) of this rule do not adequately protect the health, safety or welfare of the public as provided for in ORS Chapter 467, the Department may require the noise source to meet the following rules:

(A) Octave Bands. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceeds applicable levels specified in Table 10.

(B) One-third Octave Bands. No person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if such operation generates a median one-third octave band sound pressure level which, as measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, and in a one-third octave band at a preferred frequency, exceeds the arithmetic average of the median sound pressure levels of the two adjacent one-third octave bands by:

(i) 5 dB for such one-third octave band with a center frequency from 500 Hertz to 10,000 Hertz, inclusive. Provided: such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band, or;

(ii) 8 dB for such one-third octave band with a center frequency from 160 Hertz to 400 Hertz, inclusive. Provided: such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band, or;

(iii) 15 dB for such one-third octave band with a center frequency from 25 Hertz to 125 Hertz, inclusive. Provided: such one-third octave band sound pressure level exceeds the sound pressure level of each adjacent one-third octave band.

This rule shall not apply to audible discrete tones having a one-third octave band sound pressure level 10 dB or more below the allowable sound pressure levels specified in Table 10 for the octave band which contains such one-third octave band.

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which

the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurement procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1) or to such other procedures as are approved in writing by the Department.

(b) Unless otherwise specified the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from the point on the noise sensitive building nearest the noise source,

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, person owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1).

(b) Nothing in this section shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site,

(B) Reasonable facilities, where available, including but not limited to electric power and ladders adequate to perform the testing,

(C) Cooperation in the reasonable operation, manipulation or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions. Except as otherwise provided in subsection (1)(b)(B)(ii), the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis.

(b) Warning devices not operating continuously for more than 5 minutes.

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles.

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by preemptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations.

promulgated pursuant to section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in section 17(c)(2) of the Act.

(e) Sounds created by bells, chimes, or carillons.

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time.

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment.

(i) Sounds created by lawn care maintenance and snow removal equipment.

(j) Sounds generated by the operation of aircraft and subject to preemptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not preemptively regulated by the federal government or controlled under OAR 340-35-045.

(k) Sounds created by the operation of road vehicle auxiliary equipment complying with the noise rules for such equipment as specified in OAR 340-35-030(1)(e).

(l) Sounds created by agricultural activities.

(m) Sounds created by activities related to the growing or harvesting of forest tree species on forest land as defined in subsection (1) of ORS 526.324.

(6) Exceptions: Upon written request from the owner or controller of an industrial or commercial noise source, the Department may authorize exceptions to section 340-35-035(1), pursuant to rule 340-35-010, for:

(a) Unusual and/or infrequent events.

(b) Industrial or commercial facilities previously established in areas of new development of noise sensitive property.

(c) Those industrial or commercial noise sources whose statistical noise levels at the appropriate measurement point are exceeded by any noise source external to the industrial or commercial noise source in question.

(d) Noise sensitive property owned or controlled by the person who controls or owns the noise source.

(e) Noise sensitive property located on land zoned exclusively for industrial or commercial use.

Noise Control Regulations for Motor Sports Vehicles and Facilities

340-35-040

(1) Statement of Purpose. (a) The Commission finds that the periodic noise pollution caused by Oregon motor sports activities threatens the environment of citizens residing in the vicinity of motor sports facilities. To mitigate motor sports noise impacts, a coordinated statewide program is desirable to ensure that effective noise abatement programs are developed and implemented where needed. This abatement program includes measures to limit the creation of new noise impacts and the reduction of existing noise impacts to the extent necessary and practicable.

(b) Since the Commission also recognizes the need of Oregon's citizens to participate in recreational activities of their choice, these rules balance those citizen needs which may conflict when motor sports facilities are in operation. Therefore, a policy of continuing participation in standards development through the active cooperation of interested parties is adopted. The choice of these parties is to limit the noise emission levels of racing and recreational vehicles, to designate equipment requirements, and to establish appropriate hours of operation. It is anticipated that safety factors, limited technology, special circumstances, and special events may require exceptions to these rules in some instances; therefore, a mechanism to accommodate this necessity is included in this rule.

(c) This rule is designed to encourage the motor sports facility owner, the vehicle operator, and government to cooperate to limit and diminish noise and its impacts. These ends can be accomplished by encouraging compatible land uses and controlling and reducing the racing vehicle noise impacts on communities in the vicinity of motor sports facilities to acceptable levels.

(d) This rule is enforceable by the Department and civil penalties ranging from a minimum of \$25 to a maximum of \$500 may be assessed for each violation. The motor sports facility owner, the racing vehicle owner and the racing vehicle driver are held responsible for compliance with provisions of this rule. A schedule of civil penalties for noise control may be found under OAR 340-12-052.

(2) Standards:

(a) Drag Racing Vehicle. No motor sports facility owner and no person owning or controlling a drag racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler.

(b) Oval Course Racing Vehicle. No motor sports facility owner and no person owning or controlling an oval course racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside.

(c) Sports Car Racing Vehicle. No motor sports facility owner and no person owning or controlling a sports car racing vehicle shall cause or permit its operation at any motor sports

facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside.

(d) Closed Course Motorcycle Racing Vehicle. No motor sports facility owner and no person owning or controlling a closed course motorcycle racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside or 105 dBA at 20 inches (.5 meter) from the exhaust outlet during the stationary measurement procedure.

(e) Open Course Motorcycle Racing Vehicle. No motor sports facility owner and no person owning or controlling an open course motorcycle racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions do not exceed 105 dBA at 20 inches (.5 meter) from the exhaust outlet during the stationary measurement procedure.

(f) Four Wheel Drive Racing Vehicles. No motor sports facility owner and no person owning or controlling a four wheel drive racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside.

(g) Watercraft Racing Vehicle. No motor sports facility owner and no person owning or controlling a watercraft racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside.

(h) Autocross or Solo Racing Vehicle. No motor sports facility owner and no person owning or controlling an autocross or solo racing vehicle shall cause or permit its operation on any temporary autocross or solo course unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 90 dBA at trackside. Autocross and solo events conducted on a permanent motor sports facility, such as a sports car or go kart course, shall comply with the requirements for sports car racing vehicles specified in subsection (2)(c) of this section.

(i) Go Kart Racing Vehicle. No motor sports facility owner and no person owning or controlling a go kart racing vehicle shall cause or permit its operation at any motor sports facility unless the vehicle is equipped with a properly installed and well maintained muffler and noise emissions from its operation do not exceed 105 dBA at trackside.

(3) New Motor Sports Facilities. Prior to the construction or operation of any permanent new motor sports facility, the facility owner shall submit for Department approval the projected motor sports facility noise impact boundaries. The data and analysis used to determine the boundary shall also be submitted to

the Department for evaluation. Upon approval of the boundaries, this information shall be submitted to the appropriate local planning unit and the Department of Land Conservation and Development for their review and appropriate action.

(4) Practice Sessions. Notwithstanding section (2) of this rule, all racing vehicles in order to operate in practice sessions, shall comply with a noise mitigation plan which shall have been submitted to and approved by the motor sports advisory committee and the Director. Such plans may be developed and submitted prior to each racing season. An approved plan may be varied with prior written approval of the Department.

(5) Recreational Park. When a motor sports facility is used as a recreational park for the operation of off-road recreational vehicles, the ambient noise limits of OAR 340-35-030(1)(d) shall apply.

(6) Operations:

(a) General. No motor sports facility owner and no person owning or controlling a racing vehicle shall permit its use or operation at any time other than the following:

(A) Sunday through Thursday during the hours 8 a.m. to 10 p.m. local time; and

(B) Friday through Saturday, state and national holidays and the day preceding, not to exceed three consecutive days, during the hours 8 a.m. to 11 p.m. local time.

(b) Overruns. Each motor sports facility may overrun the specified curfew times, including the time specified in subsection (11)(c) of this rule, not to exceed 30 minutes, no more than six (6) days per year due to conditions beyond the control of the owner. Each overrun shall be documented to the Department within 10 days of the occurrence.

(c) Special Events. Any approved special motor racing event may also be authorized to exceed this curfew pursuant to subsection (12)(a) of this rule.

(d) Continued Special Events. Any approved special event that cannot be completed within established curfew times due to circumstances beyond the control of the owner, such as but not limited to oil spills and accidents, may be continued the following day under the same conditions provided in the special event exception. The Department shall be notified within 10 days of any continued special event.

(7) Measurement and Procedures. All instruments, procedures and personnel involved in performing sound level measurements shall conform to the requirements specified in Motor Race Vehicle and Facility Sound Measurement and Procedure Manual, NPC-35, or to standard methods approved in writing by the Department.

(8) Monitoring and Reporting:

(a) It shall be the responsibility of the motor sports facility owner to measure and record the required noise level data as specified under Subsections (2) (b)-(i) of this rule and the Motor Race Vehicle and Facility Sound Measurement and Procedure Manual, NPC-35. The owner shall either keep such recorded noise dat

available for a period of at least one calendar year or submit such data to the Department for storage. Upon request the owner shall make such recorded noise data available to the Department.

(b) When requested by the Department, any motor sports facility owner shall provide the following:

(A) Free access to the facility

(B) Free observation of noise level monitoring

(C) Cooperation and assistance in obtaining the reasonable operation of any Racing Vehicle using the facility as needed to ascertain its noise emission level.

(9) Vehicle Standards. No motor sports facility owner and no person owning or controlling a racing vehicle shall cause or permit a racing event or practice session unless the vehicle is equipped and operated in accordance with these rules.

(10) Vehicle Testing. Nothing in this section shall preclude the motor sports facility owner from testing or barring the participation of any racing vehicle for non-compliance with these rules.

(11) Exemptions:

(a) Any motor sports facility whose racing surface is located more than 2 miles from the nearest noise sensitive property shall be exempt from this rule.

(b) Any top fuel-burning drag racing vehicle shall be exempt from the requirements of subsection (2)(a) of this section. No later than January 31, 1985 the Department shall report to the Commission on progress toward muffler technology development for this vehicle class and propose any necessary recommendations to amend this exemption.

(c) Operation of non-complying jet powered dragsters between the hours of 11 am and 10 pm.

(d) Operation of non-muffled racing vehicles at practice sessions between 12:00 noon and 3:00 p.m. as part of an approved plan as required pursuant to Section (4) of this rule.

(12) Exceptions. The Department shall consider the majority and minority recommendations of the motor sports advisory committee prior to the approval or denial of any exception to these rules. Exceptions may be authorized by the Department for the following pursuant to OAR 340-35-010:

(a) Special motor racing events.

(b) Race vehicle or class of vehicles whose design or mode of operation makes operation with a muffler inherently unsafe or technically unfeasible.

(c) Motor sports facilities previously established in areas of new development of noise sensitive property.

(d) Noise sensitive property owned or controlled by a motor sports facility owner.

(e) Noise sensitive property located on land zoned exclusively for industrial or commercial use.

(f) Any motor sports facility owner or race sanctioning body that proposes a racing vehicle noise control program that accomplishes the intended results of the standards of section

(2), the measurement and procedures of section (7), the monitoring and the reporting of section (8), of this rule.

(g) Any motor sports facility demonstrating that noise sensitive properties do not fall within the motor sports facility noise impact boundaries may be exempt from the curfew limits of section (6) and the monitoring and reporting requirements of section (8) of this rule.

(h) Any practice session for non-muffled racing vehicles that does not meet the exemption requirements specified in Subsection (11) (d) of this rule.

(13) Motor Sports Advisory Committee Actions. The committee shall serve at the call of the chairman who shall be elected by the members in accordance with the rules adopted by the committee for its official action.

(14) Effective Date. These rules shall be effective January 1, 1982.

#### Noise Control Regulations for Airports

340-35-045 (1) Statement of Purpose. (a) The Commission finds that noise pollution caused by Oregon airports threatens the public health and welfare of citizens residing in the vicinity of airports. To mitigate airport noise impacts a coordinated statewide program is desirable to ensure that effective Airport Noise Abatement Programs are developed and implemented where needed. An abatement program includes measures to prevent the creation of new noise impacts or the expansion of existing noise impacts to the extent necessary and practicable. Each abatement program will primarily focus on airport operational measures to prevent increased, and to lessen existing, noise levels. The program will also analyze the effects of airport noise emission regulations and land use controls.

(b) The principal goal of an airport proprietor who may be required to develop an Airport Noise Abatement program under this rule should be to reduce noise impacts caused by aircraft operations, and to address in an appropriate manner the conflicts which occur within the higher noise contours.

(c) The Airport Noise Criterion is established to define a perimeter for study and for noise sensitive use planning purposes. It is recognized that some or many means of addressing aircraft/airport noise at the Airport Noise Criterion Level may be beyond the control of the airport proprietor. It is therefore necessary that abatement programs be developed, whenever possible, with the cooperation of federal, state and local governments to ensure that all potential noise abatement measures are fully evaluated.

(d) This rule is designed to encourage the airport proprietor, aircraft operator, and government at all levels to cooperate to prevent and diminish noise and its impacts. These ends may be accomplished by encouraging compatible land uses and controlling and reducing the airport/aircraft noise impacts

on communities in the vicinity of airports to acceptable levels.

(2) Airport Noise Criterion. The criterion for airport noise is an Annual Average Day-Night Airport Noise Level of 55 dBA. The Airport Noise Criterion is not designed to be a standard for imposing liability or any other legal obligation except as specifically designated within this Section.

(3) Airport Noise Impact Boundary:

(a) Air Carrier Airports. Within twelve months of designation, the proprietor of any Air Carrier Airport shall submit for Department approval, the existing airport Noise Impact Boundary. The data and analysis used to determine the boundary shall also be submitted to the Department for evaluation.

(b) Existing Non-Air Carrier Airports. After an unsuccessful effort to resolve a noise problem pursuant to subsection (5), the Director may require the proprietor of any existing non-air carrier airport to submit for Department approval, all information reasonably necessary for the calculation of the existing airport Noise Impact Boundary. This information is specified in the Department's Airport Noise Control Procedure Manual (NPCS-37), as approved by the Commission. The proprietor shall submit the required information within twelve months of receipt of the Director's written notification.

(c) New Airports. Prior to the construction or operation and any required local government land-use approval of any New Airport, the proprietor shall submit for Department approval the projected airport Noise Impact Boundary for the first full calendar year of operation. The data and analysis used to determine the boundary shall also be submitted to the Department for evaluation. The Department shall notify the appropriate local planning unit of the results of their evaluation.

(d) Airport Master Planning. Any airport proprietor who obtains funding to develop an Airport Master Plan shall submit for Department approval an existing noise impact boundary and projected noise impact boundaries at five, ten, and twenty years into the future. The data and analysis used to determine the boundaries shall also be submitted to the Department for evaluation.

(e) Impact Boundary Approval. Within 60 days of the receipt of a completed airport noise impact boundary, the Department shall either consider the boundary approved or provide written notification to the airport proprietor of deficiencies in the analysis.

(4) Airport Noise Abatement Program and Methodology:

(a) Abatement Program. The proprietor of an existing or new airport whose airport Noise Impact Boundary includes Noise Sensitive Property, or may include Noise Sensitive Property, shall submit a proposed Airport Noise Abatement Program for Commission approval within 12 months of notification, in writing, by the Director. The Director shall give such notification when the Commission has reasonable cause to believe that an abatement program is necessary to protect the health, safety or welfare

of the public following a public informational hearing on the question of such necessity. Reasonable cause shall be based upon a determination that: 1) Present or planned airport operations cause or may cause noise impacts that interfere with noise sensitive use activities such as communication and sleep to the extent that the public health, safety or welfare is threatened; 2) These noise impacts will occur on property presently used for noise sensitive purposes, or where noise sensitive use is permitted by zone or comprehensive plan; and 3) It appears likely that a feasible noise abatement program may be developed.

(b) Program Elements. An Airport Noise Abatement Program shall consist of all of the following elements, but if it is determined by the Department that any element will not aid the development of the program, it may be excluded.

(A) Maps of the airport and its environs, and supplemental information, providing:

(i) Projected airport noise contours from the Noise Impact Boundary to the airport property line in 5 dBA increments under current year of operations and at periods of five, ten, and twenty years into the future with proposed operational noise control measures designated in subsection (4)(b)(B);

(ii) All existing Noise Sensitive Property within the airport Noise Impact Boundary;

(iii) Present zoning and comprehensive land use plan permitted uses and related policies;

(iv) Physical layout of the airport including the size and location of the runways, taxiways, maintenance and parking areas;

(v) Location of present and proposed future flight tracks;

(vi) Number of aircraft flight operations used in the calculation of the airport noise levels. This information shall be characterized by flight track, aircraft type, flight operation, number of daytime and nighttime operations, and takeoff weight of commercial jet transports.

(B) An airport operational plan designed to reduce airport noise impacts at Noise Sensitive Property to the Airport Noise Criterion to the greatest extent practicable. The plan shall include an evaluation of the appropriateness and effectiveness of the following noise abatement operations by estimating potential reductions in the airport Noise Impact Boundary and numbers of Noise Sensitive Properties impacted within the boundary, incorporating such options to the fullest extent practicable into any proposed Airport Noise Abatement Program:

(i) Takeoff and landing noise abatement procedures such as thrust reduction or maximum climb on takeoff;

(ii) Preferential and priority runway use systems;

(iii) Modification in approach and departure flight tracks;

(iv) Rotational runway use systems;

(v) Higher glide slope angles and glide slope intercept altitudes on approach;

(vi) Displaced runway thresholds;

- (vii) Limitations on the operation of a particular type or class of aircraft, based upon aircraft noise emission characteristics;
- (viii) Limitations on operations at certain hours of the day;
- (ix) Limitations of the number of operations per day or year;
- (x) Establishment of landing fees based on aircraft noise emission characteristics or time of day;
- (xi) Rescheduling of operations by aircraft type or time of day;
- (xii) Shifting operations to neighboring airports;
- (xiii) Location of engine run-up areas;
- (xiv) Times when engine run-up for maintenance can be done;
- (xv) Acquisition of noise suppressing equipment and construction of physical barriers for the purpose of reducing aircraft noise impact;
- (xvi) Development of new runways or extended runways that would shift noise away from populated areas or reduce the noise impact within the Airport Noise Impact Boundary.

(C) A proposed land use and development control plan, and evidence of good faith efforts by the proprietor to obtain its approval, to protect the area within the airport Noise Impact Boundary from encroachment by non-compatible noise sensitive uses and to resolve conflicts with existing unprotected noise sensitive uses within the boundary. The Plan is not intended to be a community-wide comprehensive plan; it should be airport-specific, and should be of a scope appropriate to the size of the airport facility and the nature of the land uses in the immediate area. Affected local governments shall have an opportunity to participate in the development of the plan, and any written comments offered by an affected local government shall be made available to the Commission. The Department shall review the comprehensive land use plan of the affected local governments to ensure that reasonable policies have been adopted recognizing the local government's responsibility to support the proprietor's efforts to protect the public from excessive airport noise. The plan may include, but not be limited to, the following actions within the specified noise impact zones:

- (i) Changes in land use through non-noise sensitive zoning and revision of comprehensive plans, within the Noise Impact Boundary (55 dBA);
- (ii) Influencing land use through the programming of public improvement projects within the Noise Impact Boundary (55 dBA);
- (iii) Purchase assurance programs within the 65 dBA boundary;
- (iv) Voluntary relocation programs within the 65 dBA boundary;
- (v) Soundproofing programs within the 65 dBA boundary, or within the Noise Impact Boundary (55 dBA) if the governmental entity with land use planning responsibility desires, and will play a major role in implementation.

- (vi) Purchase of land for airport use within the 65 dBA boundary;
- (vii) Purchase of land for airport related uses within the 65 dBA boundary;
- (viii) Purchase of land for non-noise sensitive public use within the Noise Impact Boundary (55 dBA);
- (ix) Purchase of land for resale for airport noise compatible purposes within the 65 dBA boundary;
- (x) Noise impact disclosure to purchaser within the Noise Impact Boundary (55 dBA);
- (xi) Modifications to Uniform State Building Code for areas of airport noise impact within the Noise Impact Boundary (55 dBA).

(c) Federal Aviation Administration Concurrence. The proprietor shall use good faith efforts to obtain concurrence or approval for any portions of the proposed Airport Noise Abatement Program for which the airport proprietor believes that Federal Aviation Administration concurrence or approval is required. Documentation of each such effort and a written statement from FAA containing its response shall be made available to the Commission.

(d) Commission Approval. Not later than twelve months after notification by the Director pursuant to subsection (4)(a), the proprietor shall submit a proposed Airport Noise Abatement Program to the Commission for approval. Upon approval, the abatement program shall have the force and effect of an order of the Commission. The Commission may direct the Department to undertake such monitoring or compliance assurance work as the Commission deems necessary to ensure compliance with the terms of its order. The Commission shall base its approval or disapproval of a proposed Noise Abatement Program upon:

- (A) The completeness of the information provided;
- (B) The comprehensiveness and reasonableness of the proprietor's evaluation of the operational plan elements listed under subsection (4)(b)(B);
- (C) The presence of an implementation scheme for the operational plan elements, to the extent feasible;
- (D) The comprehensiveness and reasonableness of the proprietor's evaluation of land use and development plan elements listed under subsection (4)(b)(C);
- (E) Evidence of good faith efforts to adopt the land use and development plan, or obtain its adoption by the responsible governmental body, to the extent feasible;
- (F) The nature and magnitude of existing and potential noise impacts;
- (G) Testimony of interested and affected persons; and
- (H) Any other relevant factors.

(e) Program Renewal. No later than six (6) months prior to the end of a five year period following the Commission's approval, each current airport Noise Abatement Program shall be reviewed and revised by the proprietor, as necessary, and

submitted to the Commission for consideration for renewal.

(f) Program Revisions. If the Director determines that circumstances warrant a program revision prior to the scheduled five (5) year review, the Airport Proprietor shall submit to the Commission a revised program within twelve (12) months of written notification by the Director. The Director shall make such determination based upon an expansion of airport capacity, increase in use, change in the types or mix of various aircraft utilizing the airport, or changes in land use and development in the impact areas that were unforeseen in earlier abatement plans. Any program revision is subject to all requirements of this rule.

(5) Consultation. The Director shall consult with the airport proprietor, members of the public, the Oregon Departments of Transportation, Land Conservation and Development and any affected local government in an effort to resolve informally a noise problem prior to issuing a notification under subsection (3)(b), (4)(a), and (4)(f) of this section.

(6) Noise Sensitive Use Deviations. The airport noise criterion is designed to provide adequate protection of noise sensitive uses based on out-of-doors airport noise levels. Certain noise sensitive use classes may be acceptable within the airport Noise Impact Boundary if all measures necessary to protect interior activities are taken.

(7) Airport Noise Monitoring. The Department may request certification of the airport noise impact boundary by actual noise monitoring, where it is deemed necessary to approve the boundary pursuant to subsection (3)(e).

(8) Exceptions. Upon written request from the Airport Proprietor, the Department may authorize exceptions to this section, pursuant to rule 340-35-010, for:

(a) Unusual or infrequent events;

(b) Noise sensitive property owned or controlled by the airport;

(c) Noise sensitive property located on land zoned exclusively for industrial or commercial use.

#### Variances

340-35-100 (1) Conditions for Granting. The Commission may grant specific variances from the particular requirements of any rule, regulation, or order to such specific persons or class of persons or such specific noise source upon such conditions as it may deem necessary to protect the public health and welfare, if it finds that strict compliance with such rule, regulation, or order is inappropriate because of conditions beyond the control of the persons granted such variance or because of special circumstances which would render strict compliance unreasonable or impractical due to special physical conditions or cause, or because strict compliance would result in substantial curtailment or closing down of a business, plant, or operation, or because no other alternative facility or method

of handling is yet available. Such variances may be limited in time.

(2) Procedure for Requesting. Any person requesting a variance shall make his request in writing to the Department for consideration by the Commission and shall state in a concise manner the facts to show cause why such variance should be granted.

(3) Revocation or Modification. A variance granted may be revoked or modified by the Commission after a public hearing held upon not less than 20 days notice. Such notice shall be served upon the holder of the variance by certified mail and all persons who have filed with the Commission a written request for such notification.

TABLE 1

(340-035-025)

New Motor Vehicle Standards

Moving Test at 50 Feet (15.2 Meters)

<u>Vehicle Type</u>	<u>Effective For</u>	<u>Maximum Noise Level, dBA</u>
Motorcycles	1975 Model	86
	1976 Model	83
	1977-1982 Models	81
	1983-1985 Street Models built after December 31, 1982	83
	Street Models after 1985	80
	Moped Models built after December 31, 1982	70
	Off-Road Models with engine displacements of 170 cc and lower:	
	1983-1985 Models built after December 31, 1982	83
	Models after 1985	80
	Off-Road Models with engine displacement greater than 170 cc:	
1983-1985 Models built after December 31, 1982	86	
Models after 1985	82	
Snowmobiles as defined in ORS 481.048	1975 Model	82
	Models after 1975	78
Trucks and school buses in excess of 10,000 pounds (4536 kg) GVWR	1975 Model	86
	1976-1981 Models or Models manufactured after January 1, 1978 and before January 1, 1986	83
	Models manufactured after January 1, 1986 and before (Reserved)	80
	Models manufactured after (Reserved)	(Reserved)
Automobiles, Light Trucks, and All Other Road Vehicles	1975 Model	83
	Models after 1975	80
Buses except school buses, as defined under ORS 481.030	1975 Model	86
	1976-1978 Models	83
	Models after 1978	80
Motorboats	Models offered for sale after June 30, 1980	82

TABLE 2

(340-35-030)

In-Use Road Vehicle Standards

## Stationary Test

<u>Vehicle Type</u>	<u>Model Year</u>	<u>Maximum Noise Level, dBA</u>	<u>Minimum Distance from Vehicle to Measurement Point</u>
All vehicles described in ORS 481.205(2)(a)	Before 1976	94	25 feet (7.6 met
	1976 and After	91	25 feet (7.6 met
All other trucks in excess of 8,000 pounds (3629 kg) GVWR	Before 1976	94	25 feet (7.6 met
	1976-1981	91	25 feet (7.6 met
	After 1981	88	25 feet (7.6 met
Motorcycles	1975 and Before	102	20 inches (1/2 m
	After 1975	99	20 inches (1/2 m
Front-engine automobiles, light trucks and all other front-engine road vehicles	All	95	20 inches (1/2 m
Rear-engine automobiles and light trucks and mid-engine automobiles and light trucks	All	97	20 inches (1/2 m
Buses as defined under ORS 481.030	Before 1976	94	25 feet (7.6 me
	1976 and After	91	25 feet (7.6 me

TABLE 3

(340-35-030)

In-Use Road Vehicle Standards

Moving Test at 50 Feet (15.2 meters) or Greater

<u>Operating Conditions</u>	<u>Trucks and Buses exceeding 10,000 pounds GVWR</u>	<u>Automobiles and light trucks</u>	<u>Motorcycles</u>
Posted 45 mph or less under any grade, load, acceleration or deceleration.	86	72	78
Posted greater than 45 mph under any grade, load, acceleration or deceleration.	90	78	82
Moving at 35 mph or less on level roadway under constant speed more than 200 feet from stop.	84	70	74

TABLE 4

(340-35-030)

Off-Road Recreational Vehicle Standards  
Allowable Noise Limits

<u>Vehicle Type</u>	<u>Model Year</u>	<u>Maximum Noise Level (dBA) and Distance from Vehicle to Measurement Point</u>	
		<u>Stationary Test 20 Inches (1/2 Meter)</u>	<u>Moving Test at 50 Feet (15.2 Meters)</u>
Motorcycles	1975 and Before	102	85
	After 1975	99	82
Snowmobiles	1971 and Before		86
	1972-1975		84
	After 1975		80
Boats	Underwater exhaust		84
	Atmosphere exhaust	All	84
All Others	Front engine	All	95
	Mid and rear engines	All	97
			78



TABLE 8

(340-35-035)

New Industrial and Commercial Noise Source Standards

Allowable Statistical Noise Levels in Any One Hour

<u>7 a.m. - 10 p.m.</u>	<u>10 p.m. - 7 a.m.</u>
L <sub>50</sub> - 55 dBA	L <sub>50</sub> - 50 dBA
L <sub>10</sub> - 60 dBA	L <sub>10</sub> - 55 dBA
L <sub>1</sub> - 75 dBA	L <sub>1</sub> - 60 dBA

TABLE 9

(340-35-035)

Industrial and Commercial Noise Source Standards for Quiet Areas

Allowable Statistical Noise Levels in Any One Hour

<u>7 a.m. - 10 p.m.</u>	<u>10 p.m. - 7 a.m.</u>
L <sub>50</sub> - 50 dBA	L <sub>50</sub> - 45 dBA
L <sub>10</sub> - 55 dBA	L <sub>10</sub> - 50 dBA
L <sub>1</sub> - 60 dBA	L <sub>1</sub> - 55 dBA

TABLE 10

(340-35-035)

Median Octave Band Standards for  
Industrial and Commercial Noise Sources

Allowable Octave Band Sound Pressure Levels

<u>Octave Band Center Frequency, Hz</u>	<u>7 a.m. - 10 p.m.</u>	<u>10 p.m. - 7 a.m.</u>
31.5	68	65
63	65	62
125	61	56
250	55	50
500	52	46
1000	49	43
2000	46	40
4000	43	37
8000	40	34



WASHINGTON, D.C., NOISE REGULATIONS



**3000 GENERAL PROVISIONS**

- 3000.1 The purpose of D.C. Law 2-53 (which is codified in chapters 30 and 31 of this title) is to provide comprehensive regulations to control noise levels in the District of Columbia so as to preserve, protect, and promote the public health, safety, and welfare, and the peace and comfort of the inhabitants of the city; and to prevent injury to humans, animals, and property.
- 3000.2 It is the intent of the Council of the District of Columbia that D.C. Law 2-53 (the "Act") be liberally construed to carry out its general purpose.
- 3000.3 The Mayor shall designate an agency to administer the noise control program established by the Act.
- 3000.4 The agency that administers the noise control program shall conduct programs of public education regarding the following:
- (a) The causes, effects, and general methods of abatement and control of noise and vibration;
  - (b) The actions prohibited by the Act; and
  - (c) The procedures for reporting violations.
- 3000.5 The agency that administers the noise control program shall encourage the participation of public interest groups in related public information efforts.
- 3000.6 The agency that administers the noise control program shall request any other department or agency responsible for any proposed or final standard, regulation, or similar action to consult with it on the advisability of revising the action, if there is reason to believe that the action is not consistent with chapters 30 and 31 of this title.
- 3000.7 The agency that administers the noise control program shall establish and publish on or before November 15, 1978, the test procedures to be used for measuring sound levels to determine compliance with chapters 30 and 31 of this title.

*at this  
level or lower?  
if so where?*

3000 GENERAL PROVISIONS (Continued)

- 3000.8 The test procedures for measuring sound levels, as required by §3000.7, shall be revised periodically, as necessary.
- 3000.9 The public shall be given thirty (30) days to comment on all proposed test procedures before they are made final.
- 3000.10 On or before May 15, 1979, the agency that administers the noise control program shall establish noise assessment guidelines for the evaluation of proposed projects for the capital improvements budget and program.
- 3000.11 The guidelines required by §3000.10 may be used in the determination of the relative priority of each project in terms of noise impact.
- 3000.12 The agency that administers the noise control program shall evaluate and report to the D.C. Council every year on the effectiveness of noise control program, and shall make recommendations for any legislative or budgetary changes necessary to improve the program.
- 3000.13 Noise of safety signals, emergency pressure relief valves, and warning or alarm devices shall be exempt (including horns when necessary as a danger warning): Provided, that no person shall knowingly permit the noise to be made or to continue beyond that necessary for the emergency safety purpose, or necessary testing.
- 3000.14 Notwithstanding any specific noise limitation established by chapters 31 and 32 of this title, upon a determination by the Mayor that a given sound constitutes a noise disturbance, that sound shall be considered a violation of the Act.
- 3000.15 The Mayor shall consult with the Administrator of the Federal Aviation Administration to recommend changes in airport operations to minimize noise disturbances resulting from the landing and the take off of planes at the Washington National Airport.
- 3000.16 The Mayor shall require all departments responsible for a capital improvements budget and program to prepare an analysis of the noise impact of any proposed capital projects in accordance with noise assessment guidelines established by the administering agency pursuant to §§3000.3 through 3000.12 of this chapter.
- 3000.17 For the purposes of this section, the term "proposed capital projects" includes land acquisition, building construction, highway improvements, and fixed equipment installation.
- 3000.18 All contracts signed by the District for capital projects shall contain provisions requiring compliance with the Act.
- 3000.19 The Mayor shall ensure that any written contract, agreement, purchase order, or other instrument by which the District is committed to the expenditure of monies in return for goods or services shall contain provisions requiring compliance with the Act.

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3000.20 Nothing in this act shall be construed as repealing or limiting the effectiveness of noise limiting provisions contained in the D.C. Harbor Regulations (DCMR Title 19).

3000.21 Each separate provision of chapters 31 and 32 of this title shall be deemed independent of any other provision of those chapters and, if ~~all~~ or part of any provision, sentence, clause, or section is held illegal, invalid, unconstitutional, or inapplicable to any person or circumstance, the illegality, invalidity, unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or parts of those chapters or their application to other parts or circumstances.

3000.22 It is the legislative intent that the Act would have been enacted if an illegal, invalid, or unconstitutional provision, sentence, clause, section, or part had not been included in the Act, and if the person or circumstances to which all or part of the Act is inapplicable had been specifically exempted from the Act.

*\$ 500.00*  
**3001 MAXIMUM SOUND LEVELS**

**3001.1** No person shall cause, suffer, or permit any sound that emanates from an operation, activity, or noise source under his or her control to exceed the maximum permissible sound level established in the following table as applicable for the time of day or night and the zoning location where the noise originates.

ZONE	MAXIMUM NOISE LEVEL	
	Daytime	Nighttime
Residential, special purpose, or waterfront zone	<i>7:00 A.M. TO 9:00 P.M.</i> 60 db(A)	<i>9:00 P.M. TO 7:00 A.M.</i> 55 db(A)
Commercial or light-manufacturing zone	65 db(A)	60 db(A)
Industrial zone	70 db(A)	65 db(A)

3001.2 For the purposes of this section, the sound level shall be measured at the property line of the property on which the noise source is located, or as close as is practicable if there is an obstruction.

3001.3 Sound levels shall be measured according to the test procedures prescribed by the administering agency established under §3000.3 of chapter 30 of this title.

*See Section 3102.1 & 2 FOR TIMES.*

**3001 MAXIMUM SOUND LEVELS (Continued)**

3001.4 If a sound can be measured in a contiguous noise zone that has a more restrictive noise limitation than that from which the noise emanates, the sound level measurement at the zone line shall not exceed that established for the more restrictive zone.

3001.5 If the sound emanates from a source within an area for which the maximum permissible sound level has not been established, the maximum level shall be sixty (60) dB(A).

3001.6 Unless restricted by another section of chapters 30 and 31 of this title, sounds emanating from a street or highway shall not exceed the most restrictive sound level established for the property bordering the street or highway.

3001.7 Noise emanating from inside a motor vehicle shall be measured at a distance of not less than fifty feet (50') from the vehicle.

**3002 EXEMPTIONS: PRE-EXISTING SOURCES**

3002.1 Sounds emanating from pre-existing sources shall, to the extent indicated, be exempt from the specific noise limitations contained in §3001 of this chapter; Provided, that the exemption shall not preclude enforcement under any other section of chapters 30 and 31 of this title.

3002.2 Pre-existing sources shall be exempt for one hundred and twenty (120) days after May 15, 1978.

3002.3 Any owner or person in control of a pre-existing source that exceeds the maximum permissible sound levels as prescribed in §3001 of this chapter shall, within one hundred and twenty (120) days after May 15, 1978, file with the Mayor a written plan for the Mayor's approval of the reduction of those sound levels to the maximum permissible levels.

3002.4 Each plan submitted pursuant to §3002.3 shall include a time schedule for the accomplishment of the reduction of noise levels, and shall provide for periodic increments of progress. The Mayor shall treat the plan as a request for a variance as provided in §3006 of this chapter.

**3003 EXEMPTIONS: VEHICLES USING ONLY RAILS AND TRACKS**

3003.1 Sounds emanating from vehicles using only rails and tracks shall, to the extent indicated, be exempt from the specific noise limitations contained in §3001 of this chapter; Provided, that the exemption shall not preclude enforcement under any other section of chapters 30 and 31 of this title.

3003.2 Vehicles propelled only upon rails and tracks shall be exempt at all times.

*100*

3003.3 Railroad cars operated by the Washington Metropolitan Area Transit Authority shall be operated in a manner so as not to emit maximum noise levels in excess of those established in the following table when measured at a distance of one hundred feet (100') from the center line of the track, or at the nearest property line, whichever is the greater distance from the center line of track.

ZONE	MAXIMUM NOISE LEVEL
Residential, special purpose, or waterfront zone	75 dB(A)
Commercial or light manufacturing zone	80 dB(A)
Industrial zone	90 dB(A)

3003.4 In taking a measurement pursuant to §3003.3, the slow meter response of the sound level meter shall be used, and the measurement shall be taken approximately five feet (5') above grade.

3004 EXEMPTIONS: MISCELLANEOUS

3004.1 Sounds emanating from the sources covered in this section shall, to the extent indicated, be exempt from the specific noise limitations contained in §3001 of this chapter; Provided, that no exemption shall preclude enforcement under any other section of chapters 30 and 31 of this title.

3004.2 Individual pieces of construction equipment shall be exempt at all times. They shall be operated so as to comply with the noise limits established in §3102 of this title.

*80 dBA 70 TO 90*

3004.3 Noise of safety signals, emergency pressure relief valves, and warning or alarm devices shall be exempt (including horns when necessary as a danger warning); Provided, that no person knowingly shall permit a noise to be made or to continue beyond that necessary for the emergency safety purpose, or necessary testing.

*del*

3004.4 Noise resulting from any authorized emergency vehicle, when responding to an emergency call or acting in a time of emergency, shall be exempt; Provided, that this subsection shall not be construed to permit law enforcement, ambulance, fire, or other emergency or official personnel to make excessive noise in the performance of their duties when the noise clearly is unnecessary.

**3004 EXEMPTIONS: MISCELLANEOUS (Continued)**

- 3004.5 Noise resulting from emergency work shall be exempt at all times.
- 3004.6 The use or operation of portable power tools, home snow removal equipment, power garden devices, and other powered equipment for minor repairs or minor improvements of real or personal residential property shall be exempt on weekdays (excluding-Saturdays) during daytime and from 9:00 a.m. to 9:00 p.m. on Saturdays, Sundays, and legal holidays.
- 3004.7 Motor vehicles and motorcycles shall be exempt at all times. They shall be properly maintained and operated so as to comply with the noise limits established in chapter 31 of this title.
- 3004.8 The unamplified voice shall be exempt at all times.
- 3004.9 Noise resulting from the use of bull-horn amplifiers, permanently installed public address systems, whistles, or other devices, by personnel of the District government, the U.S. government, or other public agencies acting in their official capacities shall be exempt.
- 3004.10 Church bells or music connected with worship or official church ceremonies shall be exempt.
- 3004.11 Noise emanating from solid waste compactors shall be exempt at all times until standards are developed and promulgated by the administering agency pursuant to §3004.13. *where is this.*
- 3004.12 After giving a thirty (30) day notice, and within six (6) months after federal regulations for solid waste compactors are made final the administering agency shall develop and promulgate standards for solid waste compactors. In developing the standards, the agency shall use the federal regulations for solid waste compactors as a guideline.

**3005 VARIANCES AND TEMPORARY EXEMPTIONS**

- 3005.1 Upon the application by a person responsible for any noise source the Mayor may grant a variance or a temporary exemption from the maximum permissible noise levels or time limitations established in chapters 30 and 31 of this title when the Mayor determines the following:
- (a) That compliance with these provisions would impose an arbitrary, unreasonable, or undue hardship or inconvenience; or
  - (b) That the social value clearly outweighs the need for the limitations contained in chapters 30 and 31 of this title.

**3005 VARIANCES AND TEMPORARY EXEMPTIONS (Continued)**

- 3005.2 In determining whether to grant a variance or temporary exemption, the Mayor may consider the following:
- (a) The location;
  - (b) The time of day when the noise will occur;
  - (c) The duration of the noise;
  - (d) The magnitude of the noise relative to the feasibility of bringing the noise into conformity with chapters 30 and 31 of this title;
  - (e) Economic factors related to age and useful life of the equipment;
  - (f) The number of people affected by the variance or temporary exemption; and
  - (g) Such other matters as can be reasonably related to the impact of noise on the health, safety, welfare, peace, and quiet of the community, and the degree of hardship involved if the variance or temporary exemption is not granted.
- 3005.3 The Mayor shall grant a variance or temporary exemption only to the extent necessary to ameliorate the arbitrary, unreasonable, or undue hardship or inconvenience with due regard for the adequate protection of the public health, safety, and welfare and the intent and purpose of chapters 30 and 31 of this title.
- 3005.4 Nothing in this section shall be construed to permit any operation in violation of the Act during the pendency of a request for a variance.
- 3005.5 Nothing in this section and no variance or temporary exemption shall be construed to prevent or limit the application of the emergency procedures established under §3011 of this chapter.

**3006 VARIANCE PROCEDURES**

- 3006.1 Any person seeking a variance shall do so by filing with the Mayor a petition for a variance which shall be accompanied by plans, specifications, and other pertinent data as the Mayor may require, sufficient in scope to allow determination of the noise pollution impact that may result from granting the variance and the hardship involved if it is not granted.
- 3006.2 If the applicant is required to obtain a building permit (or some other type of permit) from the District government, he or she may include the request for a variance with the application for that permit.

3006 VARIANCE PROCEDURES (Continued)

- 3006.3 The Mayor may, at any time after an applicant files an original application, and before its expiration, require further statements in order to determine the disposition of the petition.
- 3006.4 Within three (3) months of May 15, 1978, the Mayor shall make available a list of the information to be required under this section.
- 3006.5 Notice of the variance application shall be given at least thirty (30) days before the Mayor rules on the request, unless a lesser time is justified for good cause.
- 3006.6 Notice of the variance application shall be given as follows:
- (a) The Mayor shall publish the notice in the D.C. Register;
  - (b) The applicant shall mail the notice to the owners of all property abutting the property involved in the application; and
  - (c) The applicant shall mail the notice to the occupants of property situated within two hundred feet (200') of the property involved in the application.
- 3006.7 The notice of the variance application shall show the nature of the variance requested and the location for filing an appeal.
- 3006.8 Within five (5) days after the notice appears in the D.C. Register, the applicant shall file with the Mayor a sworn affidavit demonstrating compliance with this section.
- 3006.9 Any person may submit comments on the application for a variance within twenty-five (25) days of the published notice, or within the time specified in the notice.
- 3006.10 The Mayor shall adopt and publish in the D.C. Register any additional procedures with regard to requests for variances.
- 3006.11 The Mayor may in his or her discretion hold a hearing; Provided, that a hearing shall be held if any person who may be adversely affected by the grant or denial of a variance, including the applicant, files a written request for a hearing within ten (10) days of the notice appearing in the D.C. Register.
- 3006.12 The hearing held pursuant to §3006.11 shall be held in accordance with the contested case provisions of the D.C. Administrative Procedure Act, approved October 21, 1968 (82 Stat. 1208; D.C. Code, §1-1509).
- 3006.13 In granting or denying a variance, the Mayor shall file a written opinion stating the facts and reasons for the final decision.

**3006 VARIANCE PROCEDURES (Continued)**

- 3006.14 The Mayor may condition the variance and the terms of the variance on factors that he or she deems appropriate, including a schedule of compliance specifying a definite time period within which full compliance with chapters 30 and 31 of this title and the rules and regulations adopted under the Act shall be achieved.
- 3006.15 In issuing a variance for construction work, the Mayor may prescribe the conditions, working times, types of construction equipment to be used, and permissible noise emissions as the Mayor deems to be required in the public interest.
- 3006.16 No variance issued pursuant to this section shall be adopted for a period to exceed one (1) year; Provided, that a renewal may be obtained for additional periods not to exceed two (2) years if the Mayor finds that the variance is justifiable and that the intent and purpose of the Act is not impaired.
- 3006.17 No renewal shall be granted except pursuant to the filing of an application.
- 3006.18 An application for the renewal of a variance shall be made at least sixty (60) days prior to the expiration of the variance.
- 3006.19 Notice and hearing requirements for the renewal of variances shall be the same as those applying to initial requests for variances.

**3007 TEMPORARY EXEMPTION PROCEDURES**

- 3007.1 A person may apply to the Mayor for a temporary exemption from the maximum permissible noise levels or the time limits established by chapters 30 and 31 of this title.
- 3007.2 If the applicant is required to obtain a building permit or some other type of permit from the District government, he or she may include the request for a temporary exemption with the application for that permit.
- 3007.3 The Mayor may grant the application for a temporary exemption if the Mayor deems it to be in the public interest.
- 3007.4 The approval of the temporary exemption shall be both in writing and signed by the Mayor, and shall state the following information:
- (a) The name of the party to whom the exemption is granted;
  - (b) The noise level to be permitted;
  - (c) The period of time during which the exemption shall be effective; and
  - (d) Any other conditions or qualifications deemed necessary for the protection of the public.

3007 TEMPORARY EXEMPTION PROCEDURES (Continued)

- 3007.5 A temporary exemption shall be granted for as long as is necessary, but shall not exceed five (5) days.
- 3007.6 Two (2) extensions to a temporary exemption may be granted when necessary.
- 3007.7 Notice of the Mayor's approval of a temporary exemption shall be published in the D.C. Register and shall be posted in a conspicuous spot at the location involved for a period of four (4) consecutive days next following the date of the application.
- 3007.8 Any person adversely affected by the Mayor's decision may, within ten (10) days of the decision, request a hearing on the matter.
- 3007.9 If the Mayor finds that a sufficient bona fide controversy exists regarding an application, the Mayor may, in his or her discretion, hold a hearing on the matter.
- 3007.10 The hearing held pursuant to §3007.9 shall be held as soon as practical.
- 3007.11 A decision on a temporary exemption by the Mayor shall be final, subject to a de novo review by a court of competent jurisdiction.

§§3008 - 3009: RESERVED

3010 NOTICE OF VIOLATIONS

- 3010.1 Whenever the Mayor has reason to believe that a violation of any provision of the Act has occurred, he or she may, in lieu of or in addition to any other enforcement procedure, give notice of the alleged violation to the person or persons responsible, and order the persons to take corrective measures as are deemed necessary.
- 3010.2 The notice of an alleged violation shall meet the following requirements:
- (a) It shall be in writing;
  - (b) It shall indicate the section or subsections of chapters 30 and 31 of this title that have been violated; and
  - (c) It shall state the nature of the violation (including, if applicable, any dB(A) readings, the date, and the approximate time and place of their recording).

3010 NOTICE OF VIOLATIONS (Continued)

3010.3 The notice of an alleged violation may allow reasonable time for the performance of any act required by the notice.

3010.4 The notice of an alleged violation shall be deemed properly served upon the alleged violator when it is served by one (1) of the following methods:

- (a) A copy of the notice is served personally upon the alleged violator, or is left either at the alleged violator's usual place of business or at his or her usual residence with a person over the age of sixteen (16) years who is employed or who resides at that place;
- (b) A copy of the notice is left with any agent of the person to be notified, or is left at the office of the agent or with any person employed at the office, if the alleged violator's residence or place of business cannot be found in the District by reasonable search;
- (c) A copy is mailed postage prepaid to the last known address of the person to be notified and is not returned by the Postal Service authorities; or
- (d) The notice is published on three (3) consecutive days in a daily newspaper published in the District, when one (1) of the following circumstances exists:
  - (1) No address of the person to be served is known or can, with reasonable diligence, be ascertained; or
  - (2) Any notice mailed in accordance with §3010.4(c) is returned undelivered by the Postal Service authorities.

3010.5 A notice issued pursuant to §3010 of this title shall be final unless the person adversely affected requests a hearing within the period specified in the notice of violation, or within fifteen (15) days after the date of service of the notice, whichever is less.

3010.6 Upon receipt of a request for a hearing, the Mayor shall provide the petitioner with an opportunity for a hearing in accordance with the contested case provisions of the D.C. Administrative Procedure Act, approved October 21, 1968 (82 Stat. 1208; D.C. Code, §1-1509).

3010.7 A decision sustaining, modifying, or vacating a notice shall be final.

3010.8 If any person fails to comply with a final notice issued pursuant to this section, the Mayor shall institute action as may be necessary to terminate the violation.

**3010 NOTICE OF VIOLATIONS (Continued)**

- 3010.9 Any person's failure to comply with a final notice issued pursuant to this section shall constitute a separate violation of the Act.
- 3010.10 Nothing in this section shall be construed to preclude enforcement of the provisions of the Act by recovery of a penalty pursuant to §3013 of this chapter, injunctive relief, or other appropriate remedy.

**3011 EMERGENCY PROCEDURES**

- 3011.1 Notwithstanding any other provision of the Act, if the Mayor finds that any person is acting in a manner that causes or contributes to a sound level of a characteristic and duration which is likely to be injurious to the public welfare, the health of human or animal life, or to property, or which interferes with the reasonable enjoyment of life or property, the Mayor may order the person immediately to reduce or discontinue the act.
- 3011.2 Failure to comply with the Mayor's order to reduce or discontinue an action, as required in §3011.1, shall be a violation of the Act.
- 3011.3 Any person aggrieved by an emergency order of the Mayor may, within forty-eight (48) hours of the order, request a hearing by the Mayor.
- 3011.4 Upon receiving a request for a hearing from any person aggrieved by an emergency order, the Mayor shall hold the hearing as soon as is reasonably practical.
- 3011.5 The hearing regarding an emergency order shall be conducted in accordance with the contested case provisions of the D.C. Administrative Procedure Act (D.C. Code, §1-1509).
- 3011.6 A request for a hearing on an emergency order shall not be grounds for noncompliance with any order issued pursuant to this section.
- 3011.7 After the conclusion of the hearing held pursuant to §§3011.4 and 3011.5, the person shall be notified by the Mayor of the Mayor's decision. This action shall be final; Provided, that an appeal from the action shall not be grounds for noncompliance with any order issued pursuant to this section.
- 3011.8 Nothing contained in this section shall preclude the Mayor from initiating appropriate action for the recovery of a penalty as is provided in chapters 30 and 31 of this title, nor shall it preclude the Mayor from seeking any other relief or remedy as is provided by law.

## **3012 INTERFERENCE WITH MEASUREMENT**

- 3012.1 It shall be unlawful for any person to refuse, prevent, or interfere with any lawful physical determination or measurement authorized by the Act; Provided, that the provisions of §3012.2 are complied with.
- 3012.2 No District government officer or employee shall enter any privately owned premise for the purpose of making a lawful, physical determination or measurement authorized by the Act without permission of the resident or a person in the premise, or without a valid search warrant.

## **3013 PENALTIES**

- 3013.1 Any person who violates any provision of chapters 30 or 31 shall be punished by a fine not to exceed three hundred dollars (\$300) or imprisonment not to exceed ten (10) days, or both.
- 3013.2 In the event of any violation of or failure to comply with all or any section of chapters 30 and 31 of this title, each and every day of the violation or failure shall constitute a separate offense.
- 3013.3 The penalties described in this section shall be applicable to each separate offense.

## **3014 CIVIL ENFORCEMENT**

- 3014.1 Any person may commence a civil action in a court of competent jurisdiction on his or her own behalf for injunctive relief, to enforce a requirement, or to order the Mayor to perform a non-discretionary act against any person (including the District government to the extent permitted by the Eleventh Amendment of the U.S. Constitution) who is alleged to be:
- (a) In violation of any requirement of the Act;
  - (b) In violation of any order issued by the Mayor with respect to any requirement of the Act; or
  - (c) Engaged in any act prohibited by the Act.
- 3014.2 No action shall be taken under the provisions of this section prior to sixty (60) days after the plaintiff has given notice of the violation to the Mayor, and to any alleged violator of the requirements.
- 3014.3 No action shall be taken under the provisions of this section if the Mayor has begun and is diligently prosecuting a civil or criminal action in a court of competent jurisdiction in the District to require compliance with the Act or to have the appropriate penalty assessed.

**3099 DEFINITIONS**

3099.1 As used in chapters 30 through 32 of this title, the following words or abbreviations shall have the meaning ascribed unless the context indicates a different meaning. Where technical words are not defined, or where questions of interpretation arise regarding acoustical terminology, the American National Standard Institute (ANSI) definitions shall be used as a guide.

**ANSI** - the American National Standard Institute or its successor bodies.

**Construction** - any site preparation, excavation, assembly, erection, substantial repair, alteration, or similar action (excluding demolition) of public or private rights-of-way, structures, utilities, or similar property.

**Daytime** - the hours from 7:00 a.m. to 9:00 p.m.

**dB(A)** - (A-weighted sound level) - a measure of sound pressure level, in decibels, obtained from a sound-level meter using the A-weighting network or filter as specified in ANSI S1.4-1971 or the latest approved revision of that standard.

**Decibel** - (1/10 of a bel) - a unit (abbreviated "dB") for measuring the magnitude of sound equal to twenty (20) times the logarithm, to the base ten (10), of the ratio of the sound pressure being measured to a reference sound pressure of twenty (20) micropascals.

**Emergency work** - the work necessary to restore property to a safe condition following a public calamity or "act of God," or the work required to protect the health and safety of persons.

**Leg- (Equivalent A-Weighted Sound Level)** - the constant sound level that, in a given time period, would convey the same sound energy as the actual, time varying, A-weighted sound. The number in parenthesis immediately following the term "Leg" shall denote the time period in hours.

**Maximum sound level** - the highest level observed on a sound level meter.

**Mayor** - the Mayor of the District of Columbia or his or her designated agent.

**Motorcycle** - any motor vehicle other than a motorized bicycle having either a tandem arrangement of two (2) wheels or a tricycle arrangement of three (3) wheels, and having a seat or saddle for the use of the operator.

**Motor vehicle** - any vehicle propelled either by an internal combustion engine or by electricity or steam. This term does not include motor boats and traction engines used exclusively for drawing vehicles in fields, road rollers, and vehicles propelled only upon rails and tracks.

Motorized bicycle - any motor vehicle having the following:

- (a) Either a tandem arrangement of two (2) wheels equipped with tires that are sixteen inches (16") or more in diameter, or having a tricycle arrangement of three (3) wheels equipped with tires that are sixteen inches (16") or more in diameter, weighing not more than one hundred and twenty (120) pounds;
- (b) An automatic transmission; and
- (c) A motor or engine that produces not more than one and five-tenths (1.5) brake horsepower (as rated by the Society of Automatic Engineers), with a piston displacement of not more than fifty (50) cubic centimeters, and that is capable of moving the vehicle at a speed of no more than twenty-five miles per hour (25 mph) on level ground when propelled exclusively by the motor or engine.

Nighttime - the hours from 9:00 p.m. to 7:00 a.m.

Noise - this term shall have the same definition as "sound."

Noise disturbance - any sound that endangers or injures the safety or health of humans or animals; or endangers or injures personal or real property; or that is loud and raucous; or is of a nature that will unreasonably disturb the peace, quiet, or comfort of any neighborhood.

Noise level - this term shall have the same definition as "sound level."

Noise zones - shall be defined according to the following three categories, as shown, defined, and bounded on the zoning map:

- (a) Residential, special purpose, or waterfront zone - any district listed under §§2101.11, 2101.12, or 2101.13, or 2101.16 of the D.C. Zoning Regulations, effective May 12, 1958, as amended;
- (b) Commercial or commercial-light manufacturing zone - any district listed under §2101.14 of the D.C. Zoning Regulations, effective May 12, 1958, or classified as a "C-M Commercial-light manufacturing" district under §2101.15 of the Zoning Regulations; and
- (c) General industrial zone - any district classified under §2101.15 of the Zoning Regulations, effective May 12, 1958, but not classified as a "C-M Commercial-light manufacturing" district.

Person - an individual, partnership, corporation, trust, association, firm, organization, government, or other entity.

Pre-existing source - any noise source either established and in operation or under construction prior to May 15, 1978.

3099 DEFINITIONS (Continued)

**Real property boundary** - an imaginary line along the ground surface and its vertical extension, which separates the real property owned by one (1) person from that owned by another.

**Sound** - an oscillation in pressure, particle displacement, particle velocity, or other physical parameter, in a medium with internal forces that causes compression and rarefaction of that medium. The description of sound may include any characteristic of the sound, including duration, intensity, and frequency.

**Sound level** - the weighted sound pressure level obtained by the use of a sound level meter and frequency weighting network, such as A, B, or C as specified in the ANSI specifications for sound level meters (ANSI S1.4-1971, or the latest approved revision of ANSI S1.4 standard). If the frequency weighting employed is not indicated, the A-weighting shall apply.

**Sound-level meter** - an instrument to measure the sound pressure level meeting at least either the Type II requirements of the ANSI S1.4-1971 standard or the latest approved version of the ANSI S1.4 standard.

**Street or highway** - any road, street, alley, or way in the District of Columbia, open to the use of the public, as a matter of right, for the purposes of vehicular traffic.

**Weekday** - any day except Sunday or a legal holiday.

**Zoning regulations** - the D.C. Zoning Regulations, effective May 12, 1958, as amended (DCMR Title 11).

*Field Standard  
45 db  
Nursing Home*

3100 MUSICAL INSTRUMENTS, LOUDSPEAKERS, AND AMPLIFIERS

3100.1 Noise resulting from the musical instruments, loudspeakers, and amplifiers shall not exceed the maximum noise levels contained in this section.

*7000*  
3100.2 The use, operation, or playing of, or the permitting to be used, operated, or played, any musical instrument or device, loud speaker, sound amplifier, or other similar machine or device for the production or reproduction of sound on private property or public space shall be prohibited in excess of seventy-eight (78) dB(A) at a distance of not less than one (1) meter from the source, building, or structure from which it emanates.

3100.3 The limitation of §3100.2 shall not apply to parades or public gatherings involving more than two hundred (200) people on public space for which a permit has been granted.

3101 MECHANICAL EQUIPMENT

3101.1 Noise resulting from mechanical equipment shall not exceed the maximum noise levels contained in this section.

*0000*  
3101.2 Noise resulting from the use or operation of any air-conditioning, refrigerator, heat pump, fan, swimming pool equipment, or other mechanical equipment, regardless of location, shall be prohibited in excess of sixty (60) dB(A) when measured at the property line or as close to the property line as practical if there is an obstruction.

3102 CONSTRUCTION

*Needs a permit for construction  
LAW needs to be changed as far as  
LOCATION IS CONCERNED OR REQUIRING  
Some sort of ENCLOSURE ON OUTSIDE*

*7000*  
3102.1 From 7:00 a.m. to 7:00 p.m. on any weekday, noise levels resulting from construction or demolition (excluding pile driver devices) shall not exceed a Leg(1) of eighty (80) dB(A) unless granted a variance under §3005 of chapter 30 of this title.

*el 2*  
3102.2 From 7:00 p.m. to 7:00 a.m., the maximum noise levels prescribed in §3001 of chapter 30 of this title shall apply. *65 dB(A) - NIGHT*

*PAD - Penna ave Development  
31-1  
Residential A5D High Density - Hotels  
considered commercial zone*

**3102 CONSTRUCTION (Continued)**

3102.3 In cases involving noise from construction or demolition, measurements shall be made twenty-five feet (25') from the outermost limits of the construction site.

3102.4 No permit for building construction or demolition shall be issued until the permit applicant has assured in writing that the noise emanating from the planned construction will comply with the limitations established by this section.

**3103 CONSTRUCTION IN RESIDENTIAL ZONES**

3103.1 Noise emanating from construction in residential zones shall be prohibited during the hours specified in this section irrespective of its compliance with §3001 of chapter 30 of this title.

*19-500*  
3103.2 No noise from construction, excluding minor home repairs, shall be permitted within a residential, special purpose, or waterfront zone on any Sunday or legal holiday, or after 7:00 p.m. and before 7:00 a.m. on any weekday.  
*DAY 60 dBA) night 50 dBA)*

3103.3 The limitation of §3103.2 shall not apply to the following:

- (a) Portable power tools used for minor improvement of real and personal residential property otherwise allowable under this section;
- (b) Work performed by public utilities as defined in the Act approved March 4, 1913 (37 Stat. 974; D.C. Code, §43-103);
- (c) Work performed by the Washington Metropolitan Area Transit Authority as defined in D.C. Code, §§1-1410 et seq.); or
- (d) Work performed by the subcontractors of public utilities and the Washington Metropolitan Area Transit Authority as provided in §§3103.3(b) and 3103.3(c).

3103.4 Noise emanating from the sources exempted in §3103.3 shall comply with the maximum noise levels prescribed in §3001 of chapter 30 of this title.

**3104 EXPLOSIVES**

3104.1 Noise emanating from explosives shall be prohibited during the hours specified in this section irrespective of its compliance with §3001 of chapter 30 of this title.

*19-500*  
3104.2 No blasting with explosives shall be performed on any Sunday or legal holiday or at nighttime on weekdays, except by special permit as provided in §1301 of the Second Amendment to the 1972 Building Code of the District of Columbia (Title 12 DCMR).

VU 11-  
3105 HAWKERS, PEDDLERS, AND VENDORS

- 3105.1 The shouting and crying of hawkers, peddlers, and vendors shall be prohibited at nighttime on any day of the week, irrespective of its compliance with §3001 of chapter 30 of this title.
- 3105.2 The limitation of §3105.1 shall not be construed to prohibit selling by outcry of merchandise, food, and beverages at licensed sporting events, parades, fairs, circuses, or other similar licensed entertainment events.

3106 TRASH COLLECTION

- 3106.1 Noise emanating from trash collection in any residential, special purpose, or waterfront zone shall be prohibited during the hours specified in this section irrespective of its compliance with §3001.

500.00  
3106.2 No person shall operate or permit the operation of any refuse collection vehicle in any residential, special purpose, or waterfront zone at nighttime on any day of the week. This prohibition shall not apply to vehicles owned by the District government employed for emptying litter receptacles.

3107 VEHICLE-MOUNTED LOUD SPEAKERS

- 3107.1 Noise emanating from vehicle-mounted sound amplifying equipment, instruments, and transmitting devices shall be prohibited during the hours specified in this section irrespective of its compliance with §3001 of chapter 30 of this title.

3107.2 Vehicle-mounted sound amplifying equipment, instruments, and transmitting devices shall be prohibited in streets or on highways after 9:00 a.m., and between 4:00 p.m. and 6:30 p.m.

9:00 PM TO 9:30 AM TO  
3107.3 During hours other than those specified in §3107.2, the use of vehicle-mounted sound amplifying equipment, instruments, and transmitting devices shall be subject to the limitations in §3001 of chapter 30 of this title, and the following conditions:

- (a) The vehicles are required, where traffic conditions permit, to move at least five miles per hour (5 mph);
- (b) When the vehicles are stopped for any cause, no sound shall be amplified or transmitted for more than one (1) minute, so long as the vehicle remains stationary;
- (c) Operators of the vehicles shall not hold sound amplifying equipment, instruments, or transmitting devices by hand while the vehicles are in operation; and
- (d) When vehicles are parked in legal off-street locations, the conditions set forth in §3107 of this chapter shall not apply.

3110 NEW MOTOR VEHICLES

500,00

3110.1

No person shall either sell or offer for sale a new motor vehicle or motorcycle that is to be registered for use upon the public highway that exceeds the maximum noise limits designated in the table of §3110.2 when measured at a distance of fifty feet (50') from the center line of travel in accordance with test procedures (as may be appropriate for the vehicle being tested) as prescribed in this subsection:

- (a) Those described by the Society of Automotive Engineers, Inc. (SAE), including SAE Standard J986(a) (for vehicles 10,000 GVWR and under), SAE Standard J331 (for motorcycles), and SAE Standard J184 (for vehicles over 10,000 GVWR);
- (b) Those recommended by Practice J184 (for qualifying a sound data acquisition system), and subsequent revisions of the standard; or
- (c) A nationally recognized test procedure, such as those promulgated by the EPA, as the administering agency may prescribe in accordance with §§3000.7 through 3000.9 of chapter 30 of this title.

500,00

3110.2

Each manufacturer, distributor, or importer, or his or her designate agent, shall certify in writing to the Mayor that all motor vehicles or motorcycles sold by him or her in the District comply with the provisions of the following table:

<u>TYPE OF VEHICLE and DATE OF MANUFACTURE</u>	<u>MAXIMUM NOISE LEVEL</u>
Any motorcycle, other than a motorized bicycle, manufactured after 1976	83 dB(A)
Any motor vehicle with a gross vehicle rating of more than 10,000 pounds manufactured on or after January 1, 1978	83 dB(A)
Any motor vehicle with a gross vehicle weight rating of more than 10,000 pounds manufactured on or after January 1, 1982	80 dB(A)
Any other motor vehicle weighing 10,000 pounds or less manufactured on or after January 1, 1976	83 dB(A)
Any other motor vehicle weighing 10,000 pounds or less manufactured after January 1, 1978	80 dB(A)

3111 OPERATIONAL LIMITS FOR MOTOR VEHICLES

3111.1 No person shall operate a motorcycle, motor vehicle, or combination of motor vehicles of a type subject to registration under D.C. Code, §40-103 at any time, or under any condition of grade, load, acceleration, or deceleration in a manner that exceeds the maximum noise limits designated in the table of this subsection for the specified speed limits, measured at a distance of fifty feet (50') from the center line of travel by a sound level meter switched to the A-weighting network, in accordance with such nationally recognized test procedures as the administering agency may prescribe in accordance with §§3000.7 through 3000.9 of chapter 30 of this title.

*where are these test procedures*

TYPE OF VEHICLE	NOISE LIMIT		
	35 MPH or less	Over 35 MPH	Stationary Run-up
Any motor vehicle with a manufacturer's gross vehicle weight rating of 10,000 pounds or more, and any combination of vehicles towed by that motor vehicle	86 dB(A)	90 dB(A)	88 dB(A)
Any motorcycle	82 dB(A)	86 dB(A)	--
Any other motor vehicle and any combination of vehicles towed by a motor vehicle with a manufacturer's gross weight rating of 10,000 pounds or more	76 dB(A)	82 dB(A)	

3111.2 Where a test procedure is used for which the noise levels prescribed in the table in §3111.1 would not be appropriate, the administering agency may establish and publish a table with the appropriate levels which are substantially equivalent to those established in that table.

3111.3 The public shall be provided with at least thirty (30) days to comment on all new standards and procedures before the standards are made final.

3111.4 For the purposes of this section, a motor truck, truck tractor, or bus that is not equipped with an identification plate or marking that bears the manufacturer's gross vehicle weight shall be considered as having a rating of ten thousand (10,000) pounds or more if the unladen weight is more than nine thousand (9,000) pounds.

3111 OPERATIONAL LIMITS FOR MOTOR VEHICLES (Continued)

3111.5 No person shall operate a motor vehicle equipped with an engine speed governor that generates a sound level in excess of 88 dB(A) measured on an open site with a fast meter response at fifty feet (50') from the longitudinal center line of the vehicle when its engine is accelerated from idle to a wide-open throttle governed speed with the vehicle stationary, transmission in neutral, and clutch engaged.

3111.6 The administering agency may by regulation prescribe correctional factors to the limits prescribed in the table of §3111.1 of this section when measurements are made at a site that contains large reflecting surfaces in close proximity to the vehicle or noise measuring microphone.

3111.7 A violation of the adjusted levels as provided in §3111.6 shall constitute a violation of this section.

3111.8 In the event that it is impractical to obtain a measurement fifty feet (50') from the center line of travel, the actual distance shall be measured and one (1) of the correctional factors in the following table shall be applied to the maximum permissible sound levels prescribed in the table of 3111.1 of this section.

<u>DISTANCE</u>	<u>CORRECTION</u>	
	<u>Soft site</u>	<u>Hard site</u>
35 - less than 39 ft.	+3 dB(A)	+5 dB(A)
39 - less than 43 ft.	+2 dB(A)	+4 dB(A)
43 - less than 48 ft.	+1 dB(A)	+3 dB(A)
48 - less than 58 ft.	0 dB(A)	+2 dB(A)
58 - less than 70 ft.	-1 dB(A)	+1 dB(A)
70 - less than 83 ft.	-2 dB(A)	0 dB(A)

3111.9 For the purposes of this section, "soft test site" shall mean any test site having the ground surface covered with grass, another ground cover, or a similar absorption material for one-half (1/2) or more of the distance between the microphone target point and the microphone location point.

3111.10 For the purposes of this section, "hard test site" means any test site having the ground surface covered with concrete, asphalt, packed dirt, gravel, or similar reflective material for more than one-half (1/2) the distance between the microphone target point and the microphone location point.

## 3112 ALTERATION OF MOTOR VEHICLE EXHAUST SYSTEM

3112.1 No person shall modify or alter the exhaust system of a motor vehicle or motorcycle in a manner that will amplify or increase the noise emitted by the vehicle above the level permitted under §3111 of this chapter.

3112.2 No person shall use or operate a motor vehicle or a motorcycle having an exhaust system that has been modified or altered in a manner that will amplify or increase the noise emitted by the vehicle above the level permitted under §3111 of this chapter.

## 3113 MOTOR VEHICLE INSPECTION

3113.1 The Mayor shall conduct a study to determine the advantages and feasibility of requiring a noise inspection as a part of the annual motor vehicle inspection program.

3113.2 The study required by §3113.1 shall be submitted to the D.C. Council not later than six (6) months after May 15, 1978, and shall include the following:

- (a) An estimate of the cost to the District of requiring a motor vehicle inspection program for noise (computing separately the cost for District-owned motor vehicles in contrast to the cost of all vehicles);
- (b) An estimate of the length of time that would be required per vehicle for the test, and the impact this would have on the total inspection program;
- (c) The test procedures that would be used;
- (d) An estimate of the number of cars that would fail the test, and the appropriate cost to each registrant to bring a car into compliance;
- (e) The impact of the program on the repair stations in the District; and
- (f) The impact of the program on noise levels in the District.

## 3199 DEFINITIONS

3199.1 The meanings ascribed to the definitions appearing in §3099.1 of chapter 30 of this title shall apply to the terms in this chapter.

## CHAPTER 32 NOISE MEASURING TEST PROCEDURES

### 3200 GENERAL PROVISIONS

- 3200.1 The purpose of this chapter is to establish standard testing procedures for measuring noise levels as prescribed under the provisions of chapters 30 and 31 of this title, the D.C. Noise Control Act of 1977 (D.C. Law 2-53, March 23, 1978).
- 3200.2 The intent of this chapter shall be to do the following:
- (a) Specify straight-forward procedures that are applicable to the large majority of expected situations; and
  - (b) Specify the limits of applicability of those procedures, such as situations in which acoustical specialists or specialized equipment may be required to supplement the procedures.
- 3200.3 The measurement procedures provided in this chapter shall be reviewed periodically with reference to changes in the practice of noise measurement, instrumentation, District code, and legal precedent.
- 3200.4 The measurement of noise produced by motor vehicles in transit shall be prescribed by District and federal laws. Enforcement by police officers shall be provided by District law.
- 3200.5 Any situation in which the noise source cannot be demonstrated to increase the total noise at the measurement point by at least four (4) dB(A) over the ambient level shall be considered unmeasurable by the techniques described in this chapter.
- 3200.6 Any situation in which readings exceed the statutory limits, but are less than the statutory limit plus the grace limit, the noise shall be measured with more specialized or more accurate equipment prior to deciding whether the source is in compliance with the Act.
- 3200.7 When readings exceed the statutory limits, but are less than the statutory limit plus the grace limit, consultation with qualified professional personnel shall be required.

### 3201 EQUIPMENT

- 3201.1 Sound-level meters and microphones shall meet Type II specifications per ANSI S1.4-1971.
- 3201.2 Each sound-level meter shall be qualified annually.

**3201 EQUIPMENT (Continued)**

3201.3 Each sound-level meter and microphone device shall meet the following specifications:

- (a) External calibration devices with a known sound pressure level output at a single known frequency between 200 Hz and 1000 Hz, as specified by the manufacturer;
- (b) Windscreen with insertion loss less than 0.5 dB below 8 kHz;
- (c) Stopwatch, capable of cumulative operation and accurate to two percent (2%) or better;
- (d) Wind speed indicator with at least twenty percent (20%) accuracy at twelve miles per hour (12 mph); and
- (e) Earphones with impedance meeting the sound level meter manufacturer's specifications.

**3202 SOUND LEVEL METER CALIBRATION**

3202.1 A battery check shall be performed immediately before and after a series of measurements at each test site.

3202.2 An external calibration shall be made immediately before a series of measurements at each test site and, if necessary, the meter shall be adjusted to read within 0.2 dB(A) of the level specified by the calibration unit.

3202.3 Measurements may be assumed to be valid if a calibration check after a series of measurements agrees to within 0.5 dB(A), otherwise measurements shall not be used.

3202.4 Calibration checks also may be made immediately after the series of measurements and at least one (1) time per hour during the measurement series to ensure continuing accuracy of the equipment.

**3203 EQUIPMENT SETTINGS**

3203.1 In measuring impulsive or rapidly fluctuating noise, the following procedures shall be followed:

- (a) A windscreen shall be used for all outdoor measurements;
- (b) The "C" scale shall be used on the sound level meter;
- (c) The attenuator shall be set so that the measured levels fall between the zero mark and the full scale mark on the meter scale; and
- (d) The fast meter response shall be used on the sound level meter.

### 3203 EQUIPMENT SETTINGS (Continued)

3203.2 In measuring steady (including intermittent, slowly fluctuating, or quasi-steady) noise, the following procedures shall be followed:

- (a) A windscreen shall be used for all outdoor measurements;
- (b) The "A" scale shall be used on the sound level meter;
- (c) The attenuator shall be set so that the measured levels fall between the zero mark and the full scale mark on the meter scale. At least five (5) seconds shall elapse after the attenuator is changed before measurements are taken; and
- (d) The slow meter response shall be used on the sound level meter.

### 3204 MEASUREMENT LOCATIONS

3204.1 Measurements shall be taken at the following locations:

- (a) At the property line of the property on which the noise source is located, or as close as practicable if there is an obstruction;
- (b) At a distance of one (1) meter from any musical instrument or device, or loud speaker, sound amplifier, or other similar machine or device for the production or reproduction of sound, with exceptions as designated in the Act;
- (c) At a distance of twenty five feet (25') from the outermost limits of a construction site; and
- (d) At a distance of fifty feet (50') from the center line of traffic for motor vehicles.

3204.2 The microphone shall be at least three feet (3') above the surface while measurements are being taken, except for motor vehicle stationary tests which shall be determined.

3204.3 The microphone orientation shall be as specified by the manufacturer.

3204.4 Measurements conducted on private property shall be taken with the permission of the owner or the owner's representative, or under the authority of a search warrant or a court order.

3204.5 Outdoor measurements shall not be conducted in the presence of wind speeds greater than twelve miles per hour (12 mph), nor in the presence of precipitation or fog.

**3205 MEASUREMENT PROCEDURES**

- 3205.1 Unless impracticable, earphones shall be used occasionally while noise measurements are being taken as a periodic check to ensure that the meter is responding properly to the noise source being monitored.
- 3205.2 In the case of steady (including intermittent, slowly fluctuating, or quasi-steady) noise, a measurement of the ambient noise level shall be required.
- 3205.3 If the ambient noise level of steady noise is within ten (10) dB of the source sound level, the corrections specified in the table of §3205.7 of this section shall be applied to determine the noise level due solely to the source being investigated, and the source shall be interpolated as necessary.
- 3205.4 If the ambient level of steady noise is less than three (3) dB from the noise source, no correction may be made and measurements cannot indicate true source noise level.
- 3205.5 Before citing a violation of a noise limit which may not be exceeded regardless of duration, a 2.5 dB(A) grace shall be allowed to account for all possible meter inaccuracies.
- 3205.6 Several measurements showing a violation shall be taken with at least twenty (20) seconds between each measurement.
- 3205.7 The following table shall be used for making corrections to measured ambient sound pressure levels:

Difference (in Decibels) between Sound Pressure Level Measured with Sound Source Operating and Ambient Sound Pressure Level Along dB(A)	Correction (in Decibels) to be Subtracted from Sound Pressure Level Measured with Sound Source Operating to Obtain Sound Pressure Level Due to Sound Source Alone dB(A)
Less than 4	Measurement can not be made
4	2.2
5	1.7
6	1.3
7	1.0
8	0.8
9	0.6
10	0.4
more than 10	.0

**3206 DATA AND REPORTS**

- 3206.1 The operator shall be required to fill out all pertinent information on the noise data form for field measurements.
- 3206.2 For each set of readings, the following information shall be required:
- (a) Date, time, location, operator's name;
  - (b) Wind speed and direction;
  - (c) All instrumentation models and identifying numbers;
  - (d) A sketch of the site, including measurements points, noise sources, buildings, etc.;
  - (e) Measurement of noise peaks and steady levels to the nearest decibel, and durations;
  - (f) A description of special techniques employed;
  - (g) A description of the noise, noting especially if there is an apparent pure tone or impulsive content;
  - (h) The meter damping used (fast or slow); and
  - (i) Measurement of ambient and description of ambient if obvious (highway, dogs, etc.).
- 3206.3 If the ambient level is 4-10 dB below the level found with the source operating, corrections shall be made to obtain the source noise level. The corrections shall be shown.

**3299 DEFINITIONS**

- 3299.1 The meanings ascribed to the definitions appearing in §3099.1 of chapter 30 of this title shall apply to the terms in this chapter.
- 3299.2 In addition to the definitions cited in chapter 30, the following words shall have the meaning ascribed:

**Ambient** - the noise remaining when the source being measured is turned off.

**Calibration, external** - the testing under controlled conditions of the sound level monitoring system, by use of a calibration device, whose input sound pressure level and frequency are accurately known, for the purpose of ascertaining the accuracy of the system at the input level and frequency within the meaning of the Act. The system includes a microphone, microphone cable, and sound level meter and its internal components.

**Descriptors, acoustical:** The following descriptors are often used:

<b>dB(A)</b>	A-weighted sound level measured in decibels;
<b>L<sub>d</sub></b>	daytime equivalent A-weighted sound level between the hours of 0700 and 2100;
<b>L<sub>dn</sub></b>	day-night average sound level; the twenty-four (24) hour weighted equivalent sound level, with a ten (10) decibel penalty applied to nighttime levels;
<b>L<sub>eq</sub></b>	equivalent A-weighted sound level over a given period of time;
<b>L<sub>eq</sub>(1)</b>	the L <sub>eq</sub> (1) is used in measuring construction noise and is the value of a steady state sound which has the same A-weighted average sound energy as that contained in a time varying sound. In this case, it is the equivalent sound level measured over a one (1) hour period. It is measured best with a statistical noise analyzer;
<b>L<sub>n</sub></b>	nighttime equivalent A-weighted sound level between the hours of 2100 and 0700;
<b>L<sub>max</sub></b>	maximum A-weighted sound level for a given time interval or event; and
<b>L<sub>x</sub></b>	x percent sound level, the A-weighted sound level equaled or exceeded x% of time. For example: L <sub>10</sub> : sound level exceeded ten (10) percent of time (usually the loudest level); L <sub>50</sub> : sound level exceeded fifty (50) percent of time; and L <sub>90</sub> : sound level exceeded ninety (90) percent of the time (usually the quietest level).

**Intermittent noise** - a noise that goes on and off but that is steady while it is on.

**Large reflecting surface** - a surface that may cause an interference with the noise measurements being taken (a wall, for example).

**Pure tone** - a single frequency that predominates to the extent that it is audible. Pure tones are characterized by the following: a hum, moan, howl, whine, or whistle, depending on their frequency.

**Qualified** - calibrated by an authorized acoustical standards laboratory or an authorized factory representative.

**Quasi-steady noise** - a rapid series of impulses that has the same effect on the sound level meter as a steady noise.

3299 DEFINITIONS (Continued)

**Qualification** - a comprehensive series of tests (including calibration using the full frequency response of a microphone, plus meter, plus A-weighted network) demonstrating compliance with ANSI specifications in addition to, but not required, calibration within the meaning of the Act.

**Rapidly fluctuating** - continuous noise whose level varies rapidly over a range greater than three (3) dB(A) read on the fast scale during the course of the measurements.

**Slowly fluctuating** - continuous noise whose level varies slowly over a range greater than three (3) dB(A) read on the slow scale during the course of the measurements.

**Steady noise** - a noise whose level varies less than three (3) dB(A) read on the slow scale during the course of the measurements.

**Source of violation** - consists of a single source, or of several distinct sources if all are being operated on the property from which the noise originates.