

Minnesota Attorney General: Administrative Rules Proceedings

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Version 3
August 20, 2018

94

MINNESOTA STATE REGULATIONS

Notice of filing by the Commissioner of Administration

We have received on this date, stamped and filed 2 copies of Rules and Regulations pertaining to the Pollution Control Agency (Agency or Board)

Regulation No. NPC 1+2 and NAC 1 thru 4 (new ~~amended~~)

Subject: Noise Pollution

Department of Administration
Publication, Central Services Division
Documents Section
140 Centennial Office Building
St. Paul, Minnesota 55155
Telephone: (612) 296-2874

FILED
RICHARD L. BRUBACHER
Commissioner of Administration
NOV 27 1974 11:10 am
BY Eda Staudenmaier
AUTH. SIGNATURE EJ

Stamped and filed with the Secretary of State 11-27-74

Rev. 9-72

PCA EXH 5
6-27-74 J.T.K.

STATE OF MINNESOTA

COUNTY OF RAMSEY

MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of the Adoption of Proposed Minnesota Regulations NPC-1, NPC-2 and NPC-3, Including a Permit Requirement for New Noise Sources, Non-Impulsive Noise Standards, and Definitions

ORDER FOR HEARING

To effectively implement a noise pollution abatement program, the Minnesota Pollution Control Agency deems it necessary to consider adoption of the proposed regulations captioned above pursuant to authority vested in the Agency by Minn. Stat. §116.07, subd. 2 (1971).

NOW, THEREFORE, it is ordered this 13th day of May, 1974, that a public hearing on the proposed regulations captioned above be held in the Board Room of the offices of the Minnesota Pollution Control Agency in the City of Roseville, Minnesota, 1935 W. County Road B2, beginning at 1:00 p.m. on Thursday, June 27, 1974, continuing until 9:00 p.m. and resuming on Friday, June 28, 1974, at 9:00 a.m., to continue until all interested persons, representatives and organizations have had an opportunity to be heard.

IT IS FURTHER ORDERED that notice of said hearing be given to all representatives of associations or other interested groups or individuals who have registered their names with the Secretary of State for that purpose.

Dated this 13th day of May, 1974.

Grant J. Merritt
Executive Director

PCA EXH 4
6-27-74 J.T.K.

STATE OF MINNESOTA

COUNTY OF HENNEPIN

MINNESOTA POLLUTION

CONTROL AGENCY

In the Matter of the Adoption of Proposed Minnesota Regulations NPC-1, NPC-2 and NPC-3, Including a Permit Requirement for New Noise Sources, Non-Impulsive Noise Standards, and Definitions

NOTICE OF

HEARING

NOTICE IS HEREBY GIVEN that a public hearing in the above entitled matter will be held pursuant to Minnesota Statutes, sections 15.0412 and 116.07 (1971), in the Board Room of the offices of the Minnesota Pollution Control Agency in the City of Roseville, Minnesota, 1935 W. County Road B2, beginning at 1:00 p.m. on Thursday, June 27, 1974, continuing until 9:00 p.m. and resuming on Friday, June 28, 1974, at 9:00 a.m., to continue until all interested persons, representatives and organizations have had an opportunity to be heard concerning the adoption of the proposed regulations captioned above, by submitting oral or written data, statements, comments or arguments. All testimony shall be given under oath or affirmation. Statements may be mailed to the Agency at the address below for submission into the record at any time prior to closing of the record. The record shall close at 4:30 on Friday, July 19, 1974.

The Agency proposes NPC-1 in which definitions concerning subsequent noise pollution control regulations are established.

The Agency proposes NPC-2 whereby limiting levels of noise are established on the basis of present knowledge as to what is necessary for the preservation of public health and welfare. This regulation is not applicable to impulsive noises such as gun shots. Exemptions to the standards are provided for certain living units meeting specified criteria.

The Agency proposes NPC-3 in which new noise sources which would change the existing noise levels of an area classified NAC-1, pursuant to NPC-2 subdivision (e), are required to obtain a permit from the Agency. Exemptions are made for some new noise sources meeting specified criteria.

Copies of the proposed regulations are available from the Minnesota Pollution Control Agency, Noise Pollution Control Section, and can be obtained by writing to the address given above. Copies will also be available at the hearing. These regulations are proposed regulations only and are subject to alterations or modifications as the Agency deems necessary and appropriate from its consideration of all the evidence adduced at the public hearing and all statements entered into the record.

Dated this 22nd day of May, 1974.

STATE OF MINNESOTA
POLLUTION CONTROL AGENCY

By Grant J. Merritt
Grant J. Merritt
Executive Director

PCA EXH 6
6-27-74 J.T.K.

STATE OF MINNESOTA

COUNTY OF RAMSEY

MINNESOTA

POLLUTION CONTROL AGENCY

In the Matter of the Adoption
of Proposed Minnesota Regulations
NPC-1, NPC-2 and NPC-3,
Including a Permit Requirement
for New Noise Sources,
Non-Impulsive Noise Standards,
and Definitions

A F F I D A V I T

RUTH M. GROSS, being duly sworn on oath, deposes and says:

1) That she is a full-time employee of the Minnesota Pollution Control Agency of the State of Minnesota;

2) That on the 23rd day of May, 1974, she went to the Secretary of State's Office for the State of Minnesota and requested a current list of all representatives of associations or other interested groups or individuals who had registered their names with the Secretary of State for the purpose of obtaining notices of public hearings relating to adoption of or amendments to Minnesota Pollution Control regulations;

3) That, on the 23rd day of May, 1974, in response to above request, the Secretary of State provided her with such a list, copy of which is attached hereto and incorporated by reference.

Ruth M. Gross

RUTH M. GROSS

Subscribed and sworn to
before me this 28 day of June, 1974,
at Roseville, Minnesota.

Lila Holmdahl

NOTARY PUBLIC
LILA HOLMDAHL
Notary Public, Hennepin County, Minn.
My Commission Expires Oct. 31, 1976

PCA EXH 93
6-27-74 J.T.K.

STATE OF MINNESOTA

COUNTY OF RAMSEY

MINNESOTA

POLLUTION CONTROL AGENCY

In the Matter of the Adoption of Proposed Minnesota Regulations NPC-1, NPC-2 and NPC-3, Including a Permit Requirement for New Noise Sources, Non-Impulsive Noise Standards, and Definitions

AFFIDAVIT OF SERVICE BY REGULAR MAIL

I, Ruth M. Gross, being first duly sworn on oath, depose and say that:

(1) I am a full-time employee of the Minnesota Pollution Control Agency;

(2) On the 24th day of May, 1974, in the City of Roseville, County of Ramsey, State of Minnesota, I served the attached Notice of Hearing upon each of the individuals and organizations named in the attached list by depositing in the United States mail, with postage prepaid, envelopes containing a true and correct copy of said Notice, addressed to those names and addresses on the attached list.

Ruth M. Gross

RUTH M. GROSS

Subscribed and sworn to
before me this 5th day of June, 1974.

Lila Holmdahl

NOTARY PUBLIC

LILA HOLMDAHL
Notary Public, Hennepin County, Minn.
My Commission Expires Oct. 31, 1976

STATE OF MINNESOTA

COUNTY OF RAMSEY

MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of the Adoption of Proposed Minnesota Regulations NPC-1 and NPC-2, Including Non-Impulsive Noise Standards and Definitions

STATEMENT OF NEED

The above-captioned regulation is a new regulation and is not an amendment to an existing rule or regulation.

The need to adopt the above-captioned regulation arises for the following reasons:

Since the advent of the industrial revolution, many past generations have associated noise with growth, progress, power and economic abundance. The association was so strong and the impact so deep, that society grew to accept them as synonymous. Such belief that one could not have one without the other, further expanded to the belief that nothing could be done about noise. Guided by those misconceptions, society allowed the unchecked proliferation of noise sources in the environment and passively observed the deterioration of the quality of life.

It took the roar of the jet engine to awaken society. Residents of airport communities around the world protested the intrusion. They pointed out that the one time acceptable military airports had turned into international beehives while they were not listening. They began to question the need for such noise and to explore avenues of solution. Caught in the spiral of growth, airport officials observed the situation worsen and the citizens' questions turn into demands for quietness. Similarly, highway officials started receiving complaints from residents of nearby freeways, city officials were questioned on construction projects, manufacturers were confronted by complaints on their noisy products, planners were challenged on the noise impact of projected developments...the noise climate had finally become unbearable to the urban dweller.

In analyzing the public outcry and surveying the noise environments of cities around the world, public officials everywhere were surprised to find noise levels exceeding the limits of a healthy environment. Key documents started to appear describing the magnitude of the problem:

Wilson, Sir Alan, "Noise, Final Report," Committee on the Problem of Noise, July 1963, CMND 2056 Her Majesty's Stationery Office, London, England.

"Noise, Sound Without Value," Committee on Environmental Quality of the Federal Council for Science and Technology, September 1968.

Ward, W. D. and Friche, J. E., editors "Proceedings of the Conference Noise as a Public Health Hazard," February 1969, The American Speech and Hearing Association, Washington.

"The Noise Around Us," Report of the Panel on Noise Abatement to the Commerce Technical Advisory Board, September 1970, U.S. Department of Commerce.

"Report to the President and Congress on Noise," Report of the Administrator of the Environmental Protection Agency, February 1972, U.S. Government Printing Office, Washington.

On the National level, this growing concern culminated in the passage of the Noise Control Act of 1972 in which the Congress found noise to be "a growing danger to the health and welfare of the Nation's population, particularly in urban areas."

Noise, unlike most other types of pollutants, is a localized problem. Worldwide noise problems do not necessarily equate with a noise problem in Minnesota. However, Minnesota's residents and industries have not behaved any differently than most industrialized societies in allowing the deterioration of the noise climate. In 1971 the State Legislature recognized the noise pollution situation in Minnesota and took appropriate legislative action. Additions to Minnesota Statute Section 116.07, require the Minnesota Pollution Control Agency to establish noise pollution control standards and regulations to protect the health and welfare of the residents of Minnesota. Furthermore, the 1973 Environmental Policy Act declared that it is the continuing responsibility of the State government to use all practicable means to "minimize noise, particularly in urban areas."

The make up of noise pollution in Minnesota is not much different than in other parts of the country and the world in general, with transportation being the dominant source of the problem. An idea of the magnitude of the problem can be obtained by reviewing:

"A Program for the Reduction of the Impact of Aircraft Noise Around Minneapolis-St. Paul International Airport," Urban Facts, October 1971.

"Noise Exposure Study, Interstate Freeways, Twin Cities Metropolitan Area," Minnesota Department of Highways, MN HW5-180 73-3, April 1973.

Noise is a threat to health and welfare. Noise can: cause hearing loss, interfere with sleep by awakening the receiver or by disturbing the normal sleep cycle, interfere with speech communication, mask audible danger signals, mask distress messages, interfere with rest activities of society, cause physiological body changes, cause mental stress, produce annoyance and interfere unreasonably with the enjoyment of life and property. Furthermore, noise levels in Minnesota, particularly in urban areas, have been found to exceed safe levels in many locations. As a result, the Minnesota Pollution Control Agency has found it necessary to establish standards and regulations for the control of noise.

Dated this _____ day of _____, 1974.

MINNESOTA POLLUTION CONTROL AGENCY

Harold D. Field, Jr.
Chairman

Grant J. Merritt
Executive Director

STATE OF MINNESOTA

COUNTY OF RAMSEY

MINNESOTA POLLUTION

CONTROL AGENCY

In the Matter of the Adoption of
Proposed Minnesota Regulations
NPC-1 and NPC-2, Including
Non-Impulsive Noise Standards and
Definitions

FINDINGS OF FACT

The above-entitled matter came on for hearing before the Minnesota Pollution Control Agency (hereinafter Agency) on the 27th of June, 1974, at 1:00 p.m., in the Board Room of the Agency offices, 1935 W. County Road B2, Roseville, Minnesota, after proper notice required by Minnesota Statute §15.0412 (1971) was served upon all persons, associations and other interested groups registered with the Secretary of State for that purpose.

After affording all interested persons an opportunity to present written and oral data, statements and arguments, having considered all of the evidence adduced and upon the records, files and proceedings herein, this Agency finds the following:

1. Historical evidence shows that excessive noise has long been a menace to the public health and welfare. Over the past several centuries, industrial and other developments, such as the advent of jet air transportation, has resulted in a steady increase in the intensity and pervasiveness of noise impact upon most people.

2. Noise may impact individuals by causing the following kinds of problems: hearing damage or loss, speech interference,

sleep interference and annoyance. In addition, noise can cause other effects, such as changes in muscular response, changes in the glandular system, changes in the circulatory system and psychological effects.

3. There is a great deal of individual variation in susceptibility to hearing damage from noise, depending on factors such as age and sex. However, any man, woman or child whose unprotected ears are exposed to noise of sufficient intensity and duration is likely to suffer some degree of permanent noise-induced hearing loss for which there is no foreseeable cure.

4. Noise may cause interference with normal speech by changing the perceived quality of the speech, shifting its apparent location or loudness or by making it completely inaudible.

5. Annoyance as a result of exposure to noise is a psychological response to an auditory experience. It has its roots in the unpleasantness and intensity of the noise, in the disruption by the noise of ongoing activities, and in the meaning or message carried by a givennoise.

6. The impacts of noise upon the receiver, and the receiver's need for quiet, depend upon the activity of the receiver. Therefore, varying noise standards for different land activities are important. Residential, and other areas where people sleep, require the most stringent protection of quiet; commercial areas require somewhat less quiet, and receivers in industrial areas can tolerate levels of noise which would be unacceptable in either commercial or residential areas.

7. The statute authorizing the Minnesota Pollution Control Agency to adopt maximum ambient noise levels, Minn. Stat. §116.07 subd. 2 (1971), specifically recognizes the need for varying noise levels in different areas of the state.

8. The use of categories based on the Standard Land Use Coding Manual (1969, U.S. Government Printing Office) for classification of land activities is appropriate. SLUCM is a standard system, frequently used in planning and other governmental activities, and, therefore, familiar to governmental officials, industry representatives and others.

9. Evidence indicates that for residential areas and other areas classified in NAC-1, an L_{50} daytime level of 60 and an L_{10} daytime level of 65 are sufficient to protect against hearing loss, speech interference, annoyance and other noise-related health and welfare problems. For nighttime protection from sleep interference in such areas, L_{50} and L_{10} limits 10 dBA lower than the daytime levels are needed.

10. The noise limits chosen for commercial areas classified in NAC-2 are dominated by speech interference criteria. Evidence indicates that an L_{50} of 65 and an L_{10} of 70 for such commercial areas allows oral communication at higher than normal voice levels. Hearing damage and annoyance do not generally occur at these levels for those activities. More stringent nighttime levels are not needed since sleeping does not typically occur in these areas.

11. For receivers in industrial areas, such as those within NAC-3 categories, an L_{50} of 75 and an L_{10} of 80 provides adequate

protection from hearing damage and allows communication at significantly increased voice levels. More restrictive limits for nighttime are not needed since sleeping is not typical for these land uses.

12. The noise standards for varying land activities contained in NPC-2 are consistent with the protection of the public health, defined as complete physical, mental and social well-being and not merely the absence of disease.

13. Noise at high levels may arouse a person from sleep, or prevent a person from falling asleep. At sub-arousal levels, noise may shift a person's sleep from a deep, dreamless sleep to a lighter stage of sleep.

14. Because of the human need for adequate rest and because most people are particularly susceptible to noise during sleeping hours, it is appropriate to provide greater protection during nighttime hours in land areas where sleeping is likely to take place. The choice of 10:00 p.m. to 7:00 a.m. as nighttime hours reflects nationally-recognized research which shows that these hours are the most typical for sleeping and related rest needs.

15. The evidence supports the establishment of noise standards using L_{10} and L_{50} statistical criteria. Such one-hour measurements provide a fair and suitable assessment of noise conditions in a given area. They further allow for direct measurement with easily available instrumentation. Such ease of measurement is not available with the use of other criteria, such as L_{dn} and

L_{eq}, which require more extensive instrumentation and elaborate analysis equipment.

16. While other sound measurement scales may be useful for certain specific kinds of measurement, the use of the dBA scale is most suitable for measurements of composite, maximum acceptable ambient noise levels, such as those in NPC-2. The A-weighted scale has been found to correlate as well with human response as more complex measures, which require additional and more extensive analyses. In addition, the A-weighted sound level is a standard feature on nearly all readily available sound level measuring equipment.

17. Sounds may be divided into "impulsive" and "non-impulsive" sounds. While both kinds of sounds are capable of affecting human health and welfare, it is more difficult to identify a single-number limit required to protect against adverse effects from impulsive noise because it is essential to take into account the circumstances of exposure, the type of impulse, its duration and the number of daily exposures; furthermore, non-impulsive noises are more common. Therefore, it is appropriate at this time to limit the NPC-2 levels to non-impulsive noise.

Dated: September 17, 1974

MINNESOTA POLLUTION CONTROL AGENCY

Harold D. Field, Jr., Chairman
Minnesota Pollution Control Agency

Grant J. Merritt
Executive Director

CERTIFICATE OF AGENCY'S
ADOPTION OF RULES RESOLUTION

I, Grant J. Merritt, do hereby certify that I am the Executive Director of the Minnesota Pollution Control Agency, an Agency duly authorized under the laws of the State of Minnesota, and that the following is a true, complete and correct copy of a resolution adopted at a meeting of the Agency duly and properly called and held on the 17th day of September, 1974; that a quorum was present at said meeting; that the resolution was passed by a majority of those present; that said resolution is set forth in the minutes of said meeting and has not been rescinded or modified:

> RESOLVED, that Rules NPC-1 and NPC-2 be and they are hereby approved and adopted, pursuant to authority vested in the Minnesota Pollution Control Agency by Minn. Stat. §116.07 subds. 2 and 4 and 15.0412 subd. 1 (1971), and that Harold D. Field, Jr., Chairman of the Agency and Grant J. Merritt, Executive Director of the Agency, be and they are hereby authorized to sign an order adopting these rules, and the Findings of Fact and Statement of Need also be approved.

IN WITNESS WHEREOF, I have hereunto subscribed my name this 24th day of October, 1974.

Grant J. Merritt
Executive Director

Subscribed and sworn to before
me this 24th day of October, 1974:

MARY E. WYATT
NOTARY PUBLIC — MINNESOTA
DAKOTA COUNTY
My Commission Expires July 30, 1981

Mary E. Wyatt
Notary Public

CERTIFICATE OF BOARD'S
AUTHORIZING RESOLUTION

I, Grant J. Merritt, do hereby certify that I am the Executive Director of the Minnesota Pollution Control Agency, an Agency duly authorized under the laws of the State of Minnesota, and that a resolution was adopted at the meeting of the Agency duly and properly called and held on the 19th day of February, 1974; that a quorum was present at said meeting; that the resolution was passed by a majority of those present; that the resolution is set forth in the minutes of said meeting and has not been rescinded or modified; that the resolution authorized the Minnesota Pollution Control Agency staff to call a public hearing for the purpose of promulgating regulations regarding the control of noise pollution and to perform all acts necessary to the holding of said hearing.

IN WITNESS WHEREOF, I have hereunto subscribed my name this 24th day of October, 1974.

Grant J. Merritt
Executive Director

Subscribed and sworn to before
me this 24th day of October, 1974:

MARY E. WYATT
NOTARY PUBLIC — MINNESOTA
DAKOTA COUNTY
My Commission Expires July 30, 1981

Mary E. Wyatt
Notary Public

STATE OF MINNESOTA

COUNTY OF RAMSEY

MINNESOTA POLLUTION

CONTROL AGENCY

In the Matter of the Adoption of
Proposed Minnesota Regulations
NPC-1 and NPC-2, Including
Non-Impulsive Noise Standards and
Definitions

ORDER ADOPTING
REGULATIONS

The above-entitled matter came on for hearing before the Minnesota Pollution Control Agency on the 27th day of June, 1974, at 1:00 p.m. in the Board Room of the offices of the Minnesota Pollution Control Agency, 1935 W. County Road B2, Roseville, Minnesota, after proper notice required by Minnesota Statute §15.0412 (1971) was served upon all persons, associations and other interested groups registered with the Secretary of State for that purpose.

After affording interested persons an opportunity to present written and oral data, statements and arguments, having heard all of the testimony, having considered all of the evidence adduced and upon the records, files and proceedings herein, and applicable statutory standards or criteria, and having confirmed the need for the above-captioned regulations:

NOW, THEREFORE, IT IS ORDERED that these regulations identified as regulations NPC-1 and NPC-2 are adopted this 17th day of September, 1974, pursuant to authority vested in the Minnesota Pollution Control Agency by Minn. Stat. §116.07 subds. 2 and 4 (1971).

MINNESOTA POLLUTION CONTROL AGENCY

Harold D. Field, Jr.
Chairman

Grant J. Merritt
Executive Director

STATEMENT OF COMPLIANCE
WITH THE ATTORNEY GENERAL'S
RULEMAKING PROCEDURES

I, Sandra S. Gardebring, Special Assistant Attorney General, do hereby declare that I have examined the proposed rules entitled "Definitions, Severability and Variances for Noise Pollution Control Regulations" and "Noise Standards," and all related documents and that, based on them and my personal familiarity with the applicable procedures, the Rulemaking Procedures have been followed.

Sandra S. Gardebring

Sandra S. Gardebring
Special Assistant
Attorney General

Dated: October 24, 1974.

Final Draft: 9-6-74

NPC-1 DEFINITIONS, SEVERABILITY AND VARIANCES FOR NOISE POLLUTION CONTROL REGULATIONS.

(a) Definitions.

For the purpose of all noise pollution control regulations:

(1) Agency. Agency means the Minnesota Pollution Control Agency, its agent, or representative.

(2) ANSI. ANSI means the American National Standards Institute or its successor bodies.

(3) Director. Director means the Executive Director of the Minnesota Pollution Control Agency.

(4) Daytime Hours. Daytime hours are those from 7:00 a.m. to 10:00 p.m. (0700-2200).

(5) Nighttime Hours. Nighttime hours are those from 10:00 p.m. to 7:00 a.m. (2200-0700).

(6) Person. Person means any human being, any municipality or other governmental or political subdivision, or any other public agency, any public or private corporation, any partnership, firm, association or other organization, any receiver trustee, assignee, agent or other legal representative of any of the foregoing, or any other legal entity, but does not include the Minnesota Pollution Control Agency.

(7) SLUCM. SLUCM means the Standard Land Use Coding Manual (1969, United States Government Printing Office) which designates land activities by means of numerical codes.

(8) Sound. Sound is an oscillation in pressure, stress, particle displacement, particle velocity, etc., in an elastic or partially elastic medium, or the superposition of such propagated alterations.

(9) Noise. Noise means any sound not occurring in the natural environment, including, but not limited to, sounds emanating from aircraft and highways, and industrial, commercial and residential sources.

(10) Impulsive Noise. 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.

(11) Non-Impulsive Noise. All noise not included in the definition of Impulsive Noise.

(12) Decibel. Decibel is a unit of sound pressure level, abbreviated dB.

(13) Sound Pressure Level (SPL). Sound Pressure Level is 20 times the logarithm to the base of 10 of the ratio of the pressure of a sound, p, to the reference pressure, p_r. For the purposes of these regulations, the reference pressure shall be 20 micronewtons per square meter (20 $\mu N/m^2$). In equation form, Sound Pressure Level in units of decibels is expressed as:

$$SPL\ (dB) = 20 \log_{10} p/p_r$$

(14) dBA. dBA is a unit of sound level. dBA is the weighted sound pressure level by the use of the A metering characteristic and weighting as specified in ANSI Specification for Sound Level Meters, S1.4 - 1971, which is hereby incorporated by reference. For the purpose of these regulations, dBA is used as a measure of human response to sound.

(15) L_{10}. L_{10} is the sound level, expressed in dBA, which is exceeded ten percent of the time for a one hour survey, as measured by test procedures approved by the Director.

(16) L_{50}. L_{50} is the sound level, expressed in dBA, which is exceeded fifty percent of the time for a one hour survey, as measured by test procedures approved by the Director.

(b) Severability.

If any provision of any regulation or the application thereof to any person or circumstances is held to be invalid, such invalidity shall not affect other provision or application, and to this end the provisions of all regulations and the various applications thereof are declared to be severable.

(c) Variance.

Whereupon written application of the responsible person or persons, the Agency finds that by reason of exceptional circumstances strict conformity with any provisions of any noise regulation would cause undue hardship, would be unreasonable, impractical or not feasible under the circumstances, the Agency may permit a variance upon such conditions and within such 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.

NPC-2 NOISE STANDARDS.

(a) 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 herein described. However, these standards do not, by themselves, identify the limiting levels of impulsive noise needed for the preservation of public health and welfare.

(b) Noise Standards.

	Day (0700-2200)		Night (2200-0700)	
NAC	L_{50}	L_{10}	L_{50}	L_{10}
1	60	65	50	55
2	65	70	65	70
3	75	80	75	80

(c) Noise Area Classification System According to Land Activity at Receiver.

Acceptable sound levels for the receiver are a function of the intended activity in that land area. The following noise area classifications are grouped and defined by the SLUCM numerical codes and descriptions.

(d) Noise Area Classification-1 (NAC-1) includes the following land activities:

NAC-1

11	Household units (includes farm houses)
12	Group quarters
13	Residential hotels
14	Mobile home parks or courts
15	Transient lodgings
19	Other residential, NEC*
397	Motion picture production
651	Medical and other health services
674	Correctional institutions

*NEC - Not elsewhere coded.

68	Educational services
691	Religious activities
71	Cultural activities and nature exhibitions
721	Entertainment assembly
7491	Camping and picnicking areas (Designated)
75	Resorts and group camps
79	Other cultural, entertainment, and recreational activities, NEC

(e) Noise Area Classification-2 (NAC-2) includes the following land activities:

NAC-2

4113	Railroad terminals (passenger)
4115	Railroad terminals (passenger and freight)
4122	Rapid rail transit and street railway passenger terminals
4211	Bus passenger terminals (intercity)
4212	Bus passenger terminals (local)
4213	Bus passenger terminals (intercity and local)
429	Other motor vehicle transportation, NEC
4312	Airport and flying field terminals (passenger)
4314	Airport and flying field terminals (passenger and freight)
4411	Marine terminals (passenger)
4413	Marine terminals (passenger and freight)
46	Automobile parking
4721	Telegraph message centers
492	Transportation services and arrangements
51	Wholesale trade
52	Retail trade - building materials, hardware, and farm equipment
53	Retail trade - general merchandise
54	Retail trade - food
55	Retail trade - automotive, marine craft, aircraft, and accessories
56	Retail trade - apparel and accessories
57	Retail trade - furniture, home furnishings, and equipment
58	Retail trade - eating and drinking
59	Other retail trade, NEC
61	Finance, insurance and real estate services
62	Personal services
63	Business services
64	Repair services
652	Legal services
659	Other professional services, NEC
66	Contract construction services
67	Governmental services (except 674)
69	Miscellaneous services (except 691)
72	Public assembly (except 721, 7223)
73	Amusements (except 731)

74 Recreational activities (except 7491)
76 Parks

(f) Noise Area Classification-3 (NAC-3) includes the following land activities:

NAC-3

21 Food and kindred products - manufacturing
22 Textile mill products - manufacturing
23 Apparel and other finished products made from fabrics, leather, and similar materials - manufacturing
24 Lumber and wood products (except furniture) - manufacturing
25 Furniture and fixtures - manufacturing
26 Paper and allied products - manufacturing
27 Printing, publishing and allied industries
28 Chemicals and allied products - manufacturing
29 Petroleum refining and related industries
31 Rubber and miscellaneous plastic products - manufacturing
32 Stone, clay, and glass products - manufacturing
33 Primary metal industries
34 Fabricated metal products - manufacturing
35 Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks - manufacturing
39 Miscellaneous manufacturing, NEC (except 397)
41 Railroad, rapid rail transit, and street railway transportation (except 4113, 4115, 4122)
42 Motor vehicle transportation (except 4211, 4212, 4213, 429)
43 Aircraft transportation (except 4312, 4314)
44 Marine craft transportation (except 4411, 4413)
45 Highway and street right-of-way
47 Communication (except 4721)
48 Utilities
49 Other transportation, communication and utilities, NEC (except 492)
7223 Race tracks
731 Fairgrounds and amusement parks
81 Agriculture
82 Agricultural and related activities
83 Forestry activities and related services (including commercial forest land, timber production and other related activities)
84 Fishing activities and related services
85 Mining activities and related services
89 Other resource production and extraction, NEC
-- All other activities

(g) Noise Area Classification-4 (NAC-4) includes the following land activities:

NAC-4

91 Undeveloped and unused land area (excluding non-commercial forest development)
92 Non-commercial forest development
93 Water areas
94 Vacant floor area
95 Under construction
99 Other undeveloped land and water areas, NEC

(h) Measurement Procedure.

A measurement procedure approved by the Director shall be used to determine the acceptability of sound levels in a given area. Such measurements shall be made at the point of human activity in the receiving area which is nearest the noise source and which is typical for the Noise Area Classification category of the receiving area, except where existing barriers, obstructions or reflecting surfaces prevent an accurate measurement. All measurements shall be made outdoors.

(i) Exceptions

(1) The Standards of NAC-2 may apply to buildings within the following NAC-1 categories: 11, 12, 13, 14, 15, 19, 397, 651, 68, 691, 71, 721, if all of the following conditions are met:

(i) The building is constructed and insulated in such a way as to assure that the exterior-interior sound level attenuation, measured under a measurement procedure approved by the Director, is at least 30 dBA; and

(ii) The building possesses year-around indoor climate control; and

(iii) The building has no facilities intended for outdoor activities, including but not limited to yards, swimming pools, patios, balconies, tennis courts, golf course, gardens and picnic areas.

(2) The NAC-1 Day Standards may apply to land uses in NAC-1 categories during nighttime hours in lieu of NAC-1 Night Standards if such land uses are not intended for overnight sleeping.

APPROVED AS TO FORM AND LEGALITY
11-27 1974
WARREN SPANNAUS, ATTORNEY GENERAL
BY Michael B Miller
SPECIAL ASSISTANT ATTORNEY GENERAL

STATE OF MINNESOTA
DEPARTMENT OF STATE
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Arlen I. Erdahl
Secretary of State

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RICHARD L. BRUBACHER
Commissioner of Administration
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BY Eda Staudenmaier
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