

ORDINANCE NO. 54-89

PUBLIC PEACE, SAFETY AND MORALS

NOISE CONTROL

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Section 1. Declaration Of Policy. It is the express intent of the Board of Mason County Commissioners to minimize the exposure of citizens to adverse effects of excessive noise and to protect, promote and preserve the public health and welfare, by controlling the level of noise in a manner which promotes the use, value and enjoyment of property, sleep and repose, and the quality of the environment.

Section 2. Findings. The Board of Mason County Commissioners hereby finds that residential and recreational noise is an acute problem in Mason County, requiring administration of this resolution on a twenty-four-hour basis by qualified law enforcement personnel.

Section 3. Definitions. All technical terminology used in the ordinance, not defined in this ordinance, shall be interpreted in conformance with the American National Standards Institute Specifications, Section 1.1-1960 and Section 1.4-1971.

- a. "Background sound level" means the level of all sounds in a given environment, independent of the specific source being measured.
- b. "dB(A)" means the sound level measured in decibels, using the "A" weighing network.
- c. "EDNA" means the environmental designation for noise abatement, being an area (environment) within which maximum permissible noise levels are established, as defined and described in Section 4.
- d. "Gross vehicle weight rating (GVWR)" means the value specified by the manufacturer as the loaded weight of a single vehicle.
- e. "In use" motor vehicle is any motor vehicle which is used on a public highway, except farm vehicles as defined under RCW 46.04.181.
- f. "Motor Vehicle" means any vehicle which is self-propelled, used primarily for transporting persons or property upon public highways and required to be licensed under RCW 46.16.010. (Aircraft, watercraft and vehicles used exclusively on stationary rails or tracks are not motor vehicles as that term is used herein.)
- g. "Motor vehicle racing event" means any competition between motor vehicles and/or off highway vehicles under the auspices of a sanctioning body.
- h. "Motorcycle" means a motor vehicle having a saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground: except that farm tractors shall not be included.
- i. "Muffler" means a device consisting of a series of chambers or other mechanical designs for the purpose of receiving exhaust gas from an internal combustion engine and effective in reducing sound resulting therefrom.
- j. "New motor vehicle" means a motor vehicle manufactured after December 31, 1975, whose equitable or legal title has never been transferred to a person who, in good faith, purchases the new motor vehicle for purposes other than resale.
- k. "New watercraft" means a watercraft with an internal or external combustion engine which has been manufactured after December 31, 1979, and for which the equitable or legal title has never been transferred to a person who, in good faith, purchases the new watercraft and/or engine for purposes other than resale.
- l. "Noise" or "Sound" means the intensity, duration and character of sounds from any and all sources.
- m. "Off-highway vehicle" means any self-propelled motor-driven vehicle not primarily used for transporting persons or property upon public highways nor required to be licensed under RCW 46.16.010. The term "off-highway vehicle" shall not include special construction vehicles.
- n. "Officer" or "law enforcement" means the Mason County Sheriff, his deputy or any other law enforcement officer.
- o. "Operator" means any person who is in actual physical or electronic control of a powered watercraft, motor vehicle, aircraft, off-highway vehicle, or any other engine driven vehicle.
- p. "Person" means any individual, firm, association, partnership, corporation or any other entity, public or private.

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- q. "Property boundary" means the surveyed line at ground surface, which separates the real property owned, rented, or leased by one or more persons, from that owned, rented or leased by one or more persons or more persons, and its vertical extension.
- r. "Public highway" means the entire width between the boundary lines or every way publicly maintained by the department of highways or any county or city when any part thereof is generally open to the use of the public for purposes of vehicular travel as a matter of right, within the jurisdiction of Mason County.
- s. "Racing event" means any motor vehicle competition conducted under a permit issued by Mason County or, if such permit is not required, then under the auspices of a recognized sanctioning body.
- t. "Real Property" means an interest or aggregate of rights in land which is guaranteed and protected by local law. For purposes of this ordinance, the term "real property" includes a leasehold interest.
- u. "Receiving property" means real property within which sound originating from sources outside the property is received.
- v. "Shoreline" means the existing intersection of water with the ground surface or with any permanent, shore-connected facility.
- w. "Silvaculture" is a branch of forestry dealing with the development and care of forests.
- x. "Sound level" means the weighted sound pressure level measured by the use of a sound level meter and weighted as specified in American National Standards Institute Specifications, Sections 1.4-1971.
- y. "Sound level meter" means a sound level measuring device, either Type I, S1A, Type II, or S2A, as defined by American National Standards Institute Specifications, Section 1.4-1971.
- z. "Special construction vehicle" means any vehicle which is designed and used primarily for grading, paving, earth moving, and other construction work; and which is not designed or used primarily for the transportation of persons or property on a public highway; and which is only incidentally operated or moved over the highway.
- aa. "Use" means the nature of the occupancy, the type of activity, or the character and form of improvements to which land is devoted or may be devoted.
- bb. "Warning device" means any device intended to provide public warning of potentially hazardous, emergency or illegal activities, including but not limited to a burglar alarm or vehicle back-up signal, but not including any fire alarm.
- cc. "Watercraft" means any contrivance, excluding aircraft, used or capable of being used as a means of transportation or recreation on water.
- dd. "Waters of Mason County" including all lakes, rivers, ponds streams, inland waters, saltwaters and all other surface waters and watercourses within the jurisdiction of Mason County.

Section 4. Identification Of Environments. The EDNA (Environmental Designation for Noise Abatement) of any property shall be based on the following typical uses, taking into consideration the present, future, and historical usage, as well as the usage of adjacent and other lands in the vicinity.

- a. **Class A EDNA** - Lands where human beings reside and sleep. Class A EDNAs include the following types of property used for human habitation:
 - 1) Residential,
 - 2) Multiple family living accommodations,
 - 3) Recreational and entertainment (e.g., camps, parks, camping facilities and resorts),
 - 4) Community service (e.g., orphanages, homes for the aged, hospitals, health and correctional facilities);
- b. **Class B EDNA** - Lands involving uses requiring protection against noise interference with speech. Class B EDNAs include the following types of property:
 - 1) Commercial living accommodations,
 - 2) Commercial dining establishments,
 - 3) Motor vehicle services,
 - 4) Retail services,

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- 5) Banks and office buildings,
- 6) Miscellaneous commercial services, property not used for human habitation,
- 7) Recreation and entertainment, property not used for human habitation (e.g. theaters, stadiums, fairgrounds, and amusement parks).
- 8) Community services property not used for human habitation (e.g., educational, religious, governmental, cultural and recreational facilities);
- c. **Class C EDNA** - Lands involving economic activities of such a nature that higher noise levels than experienced in other areas is normally to be anticipated. Persons working in these areas are normally covered by noise control regulations of the Department of Labor and Industries. Uses typical of Class A EDNAs are generally not permitted within such areas. Class C EDNAs include the following types of property:
 - 1) Storage, warehouse, and distribution facilities,
 - 2) Industrial property used for the production and fabrication of durable and nondurable manmade goods,
 - 3) Agricultural and silvicultural property used for the production of crops, wood products, or livestock;
- d. The appropriate EDNA for properties involved in any enforcement activity will be determined by the investigation official on the basis of criteria of (1), (2) and (3) of this subsection.

Section 5. Unlawful Sounds. It is unlawful for any person to cause sound, or for any person in possession of property on or off land, to permit sound originating from such property, to intrude into real property owned or occupied by another person, whenever such sound exceeds the maximum permissible sound levels established in the applicable sections of this ordinance.

Section 6. Maximum Permissible Sound Levels--General Application. Except where the motor vehicle noise standards or the watercraft noise standards in this ordinance are applicable, the maximum permissible noise levels are set forth below in the following table and are subject to any applicable deviations or exemptions set forth in Sections 7 through 10.

<u>EDNA OF</u>	<u>EDNA OF</u>		
<u>NOISE SOURCE</u>	<u>RECEIVING PROPERTY</u>		
	<u>Class A</u>	<u>Class B</u>	<u>Class C</u>
Class A	55 dBA	57 dBA	60 dBA
Class B	57	65	65
Class C	65	70	75

Section 7. Deviations. The maximum permissible noise levels set forth in Section 6 are subject to the following deviations.

- a. At any hour of the day or night the applicable noise limitations in the previous section above may be exceeded for any receiving property by no more than:
 - 1) 5 dBA for a total of 15 minutes in any one-hour period; or
 - 2) 10 dBA for a total of 5 minutes in any one-hour period; or
 - 3) 15 dBA for a total of 1.5 minutes in any one-hour period.

Section 8. Daytime Exemption. The following shall be exempt from the provisions of this ordinance between the hours of 7:00 a.m. and 10:00 p.m.:

- a. Sounds originating from residential property relating to temporary projects for the maintenance or repair of homes, grounds and appurtenances;
- b. Subject to Ord. 438 Subsection 2, 1975 (Fire Arms), sounds created by the discharge of firearms;

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- c. Sounds created by aircraft engine testing and maintenance not related to flight operations; provided, that aircraft testing and maintenance shall be conducted at remote sites whenever possible;
- d. Sounds created by the installation or repair of essential utility services;
- e. Sounds created by blasting.

Section 9. Daytime Residential Exemption. The following shall be exempt from the maximum permissible noise levels set forth in Section 6:

- a. Sounds originating from temporary construction sites as a result of construction activity;
- b. Sounds originating from forest harvesting, silvicultural activity, commercial agriculture and aquaculture.

Section 10. Other Exemptions. The following shall be exempt from the maximum permissible noise levels set forth in Section 6.

- a. Sounds created by the normal operation of motor vehicles while upon public highways. Such motor vehicles are nevertheless subject to the provisions of Sections 13 through 15, pertaining to motor vehicle noise standards;
- b. Sounds originating from aircraft in flight and sounds that originate at airports which are directly related to flight operations;
- c. Sounds created by surface carriers engaged in interstate commerce by railroad;
- d. Sounds created by warning devices not operating continuously for more than five minutes, or bells, chimes, and carillons;
- e. Sounds created by fire alarms used as such;
- f. Sounds created by safety and protective devices, such as relief valves, where noise suppression would defeat the intent of the device or is not economically feasible;
- g. Sounds created by emergency equipment and work or training necessary in the interests of law enforcement or for health, safety, or welfare of the community;
- h. Sounds originating from motor vehicle racing events at existing, authorized facilities;
- i. Sounds originating from officially sanctioned parades and other public events;
- j. Sounds emitted from petroleum refinery boilers during start-up of said boilers; provided, that the start-up operation is performed during the daytime hours whenever possible;
- k. Sounds created by watercraft; provided, that such watercraft shall comply with Mason County Ord. 83-88 (Motorboats) and Sections 16 through 18 of this ordinance;
- l. Subject to Ord. 438 Subsection 2, 1975 (Fire Arms), sounds created by the discharge of firearms in the course of hunting at all times;
- m. Sounds caused by natural phenomena and unamplified human voices;
- n. Sounds caused by motor vehicles over 10,000 pounds GVW, licensed or unlicensed, when operated off public highways;
- o. Sounds caused by pigs, cattle, horses, sheep, goats, and poultry whether by commercial or noncommercial activities.

Section 11. Proviso. Compliance with the maximum permissible noise levels set forth in this ordinance, or exemption from their provisions as provided in this ordinance, shall not be construed as an exemption from the provisions of this ordinance relating to public disturbances, or as a defense to any prosecution under Section 12.

Section 12. Public Disturbance Noises. It is unlawful for any person to cause, or for any person in possession of real or personal property to allow to originate from the property, sound that is a public disturbance noise. The following sounds are hereby determined to be public disturbance noises:

- a. Frequent, repetitive, or continuous sounds made by any animal which unreasonably disturbs or interferes with the peace, comfort, and repose of property owners or possessors, except that such sounds made by pigs, cattle, sheep, horses, goats, and poultry, whether from commercial or noncommercial activities; and such sounds made in animal shelter, commercial kennels, veterinary hospitals, pet shops, grooming parlors or pet kennels shall be exempt

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- under this subsection;
- b. The frequent, repetitive or continuous sounding of any horn or siren attached to a motor vehicle, except as a warning of danger or as specifically permitted or required by law;
 - c. The creation of frequent, repetitive or continuous sounds in connection with the starting, operation, repair, rebuilding or testing of any motor vehicle, motorcycle, off-highway vehicle, or internal combustion engine, within a Class A EDNA , so as to unreasonably disturb or interfere with the peace, comfort, and repose of the community.
 - d. The use of a sound amplifier or other device capable of producing amplified sound upon public streets for the purpose of commercial advertising or sales or for attracting the attention of the public to any vehicle, structure, to the contents therein, except as permitted by law, and except vendors whose sole method of selling is from a moving vehicle shall be exempt from this subsection.
 - e. The making of any loud and raucous sound within one thousand feet of any school, hospital, sanitarium, nursing or convalescent facility, which unreasonably interferes with the use of such facility, or with the peace, comfort, or repose of persons therein;
 - f. The creation by use of a musical instrument, whistle, sound amplifier, radio, stereo, television or other device capable of producing or reproducing loud and raucous sounds which emanate frequently, repetitively or continuously from any building, structure or property located within a residential area, such as sounds originating from a band session or social gathering.
 - g. Any such other sounds or actions that fall within the definition of Section 5.

Section 13. Motor Vehicle Noise Performance Standards.

- a. No person shall operate any motor vehicle or any combination of such vehicles upon any public highway under any conditions of grade, load, acceleration or deceleration in such a manner as to exceed the maximum permissible sound levels for the category of vehicle in Table 1, as measured at a distance of fifty feet (15.2 meters) from the center of the lane of travel within the speed limits specified, under procedures established by the state commission on equipment in Chapter 204.56 WAC, "Procedures for Measuring Motor Vehicle Sound Levels."

TABLE 1

IN-USE MOTOR VEHICLE NOISE PERFORMANCE STANDARDS
Measured @ 50 feet (15.2 Meters)

=====				
Maximum Sound Level, dBA				
Speed Zones				
Vehicle Category (type)	Effective Date	45mph (72 kph) or less	Over 45 mph (72 kph)	Stationary Test
=====				
Motorcycle	July 1, 1980	78	82	N/A

Automobiles, light trucks and all motor vehicles 10,000 pounds (4536 kg) GVWR or less	July 1, 1980	72 35 mph (56kph) or less	78 Over 35mph (56kph)	N/A

All motor vehicles over 10,000 pounds (4536 kg) GVWR	June 1, 1980	86	90	86
=====				

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- b. Every motor vehicle operated upon the public highways shall at all times be equipped with an exhaust system and a muffler in good working order and constant operation to prevent excessive or unusual noise.
- c. No person shall operate a motor vehicle in such a manner as to cause or allow to be emitted squealing, screeching or other such noise from the tires in contact with the ground because of rapid acceleration or excessive speed around corners or other such reason, except that noise resulting from emergency braking to avoid imminent danger shall be exempt from the provision.
- d. No person shall operate any motor vehicle upon any public highway if the vehicle exhaust system exceeds the maximum permissible sound levels of Table II for the category and year of vehicle, as measured at a distance of twenty inches (0.5 meter) from the exhaust outlet under procedures established by the state commission on equipment in Chapter 204-56 WAC, "Procedures for Measuring Motor Vehicle Sound Levels."

TABLE II

**IN-USE MOTOR VEHICLE EXHAUST SYSTEM NOISE PERFORMANCE
STANDARDS MEASURED @ 20 INCHES (0.5 METER)**

Vehicle Category (type)	Model Year	Maximum Sound Level, dBA
Motorcycles	All	99
Automobiles, light trucks and all other motor vehicles 10,000 pounds (4536 kg) GVWR or less	All	95

- f. No person shall sell or offer for sale a new motor vehicle except an off-highway vehicle, which produces a maximum noise exceeding the noise levels in Table III at a distance of fifty feet (15.2 meters) under acceleration test procedures established by the state commission on equipment in Chapter 204-56 WAC, "Procedures for Measuring Motor Vehicle Sound Levels."

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TABLE III
MAXIMUM SOUND LEVELS FOR NEW MOTOR VEHICLES
MEASURED @ 50 FEET (15.2 METERS)

Vehicle Category (type)	Date of Manufacture	Maximum Sound Level, dBA
Any motor vehicle over 10,000 pounds (4536 kg) GVWR excluding buses	before January 1, 1978 after January 1, 1978 after January 1, 1982	86 83 80
All buses over 10,000 pounds (4536 kg) GVWR	after January 1, 1980 after January 1, 1983 after January 1, 1986	85 83 80
Motorcycles	after January 1, 1976 after January 1, 1986	83 80
Automobiles, light trucks and all other motor vehicles 10,000 pounds (4536 kg) GVWR or less	after January 1, 1976	80

Section 14. Motor Vehicle Noise Exemptions. The provisions of Section 13 shall not apply to noise caused by auxiliary equipment on motor vehicles used for highway maintenance, nor to noise caused in the performance of emergency work for the immediate safety, health, or welfare of the community or of individuals of the community, or to restore property to a safe condition following a public calamity.

Section 15. Enforcement Of Motor Vehicle Noise Standards.

- a. Measurements shall be made with a sound level meter meeting Type I, S1A, Type II or S2A requirements as specified in the American National Standards Institute Specifications for Sound Level Meters S1.4-1971 as required under measurement procedures established in Chapter 204-56 WAC, "Procedures for Measuring Motor Vehicle Sound Levels."
- b. Violation of any in-use motor vehicle noise standard set forth in this ordinance shall be a traffic infraction, enforced by such authorities and in such manner as violations of Chapter 46.37 RCW.
- c. Law enforcement personnel selected to measure vehicle sound levels shall have received training in the techniques of sound measurement and the operation of sound measuring instruments.
- d. Any enforcement officer who by use of the initial inspection procedures of Chapter 204-56 suspects that a motor vehicle may be in violation of the standards of this ordinance any require the operator to have the vehicle presented for sound level measurement. Measurements of a motor vehicle may be performed at off-road sites to determine compliance with the in-use standards.
- e. Any operator who fails to comply with the directive to present the vehicle to a sound level measurement test shall be in violation of this ordinance.

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- f. Any seller, importer, or manufacturer who sells or offers for sale a motor vehicle which violates the standards in Section 13 shall be subject to a civil penalty not to exceed one hundred dollars (\$100.00). Every motor vehicle sold or offered to sale shall constitute a separate violation.

Section 16. Watercraft Noise Standards.

- a. Any watercraft operated on the waters of Mason County shall be equipped with a muffler which shall be maintained in proper working condition. Any of the following defects in the muffling system shall constitute a violation of this regulation:
 - 1) The absence of a muffler;
 - 2) The presence of a muffler cut-out, bypass, or similar device which is not standard or normal equipment for the exhaust system being inspected;
 - 3) Defects in the exhaust system including, but not limited to, pinched outlets, holes, or rusted-through areas of the muffler or pipes;
 - 4) The presence of equipment which will produce excessive or unusual noise from the exhaust system.
- b. No person shall operate any watercraft on the waters of Mason County in such a manner as to exceed the following maximum noise limits when measured at the shoreline or anywhere within a receiving property;
 - 1) At any hour of the day or night, the limit for any receiving property shall be 74 dBA;
 - 2) Between sunset and sunrise, the limit for a Class A EDNA receiving property shall be 74 dBA;
- c. Enforcement of the above standards shall be undertaken only upon receipt of a complaint made by a person who resides, owns property, or is employed in the area affected by the noise complained of, except for persons in parks, recreational areas, and wildlife sanctuaries.
- d. Any watercraft operated on the waters of Mason County shall not exceed the following maximum noise limits when measured at a distance of less than fifty feet from the closest point of the watercraft's hull according to procedures established in Section 26, "Watercraft Sound Level Measurement Procedure."
 - 1) For watercraft and engines manufactured before January 1, 1980, a noise level of 84 dBA;
 - 2) For watercraft and engines manufactured after January 1, 1980, a noise level of 82 dBA;
 - 3) For watercraft and engines manufactured after January 1, 1984, a noise level of 80 dBA.
- e. Any watercraft operated on the waters of Mason County shall not exceed the following maximum noise limits when measured at a distance of twenty inches (0.5 meter) from the exhaust outlet according to procedures established in Section 25, "Close Proximity Exhaust System Sound Level Procedure." These standards shall not apply to exhaust systems which utilize the introduction of water to the exhaust gas flow, or systems which exhaust the gas directly into water.
 - 1) For watercraft and engines manufactured before January 1, 1980, a noise level of 98 dBA;
 - 2) For watercraft and engines manufactured after January 1, 1980, a noise level of 96 dBA;
 - 3) For watercraft and engines manufactured after January 1, 1984, a noise level of 94 dBA.
- f. No person shall sell or offer for sale a new watercraft or new watercraft engine for use in any existing watercraft which

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exceeds the following maximum noise limits when measured according to the procedures of the society of automotive engineer's recommended practice, SAE-J34.

- 1) For watercraft and engines manufactured after January 1, 1980, a noise level of 82 dBA;
- 2) For watercraft and engines manufactured after January 1, 1984, a noise level of 80 dBA.

Section 17. Watercraft Noise Exemptions.

- a. Normal docking, undocking, and water skier pick-up and drop-off operations of all watercraft shall be exempt from the provisions of Section 16 (2).
- b. The following sounds shall be exempt from all provisions of Section 16;
 - 1) Sounds created by the operation of commercial and non-recreational watercraft. These commercial activities include, but are not limited to, tugboats, fishing boats, ferries, and vessels engaged in intrastate, interstate or international commerce;
 - 2) Sounds created by safety and protective devices where noise suppression would defeat the intent of the device;
 - 3) Sounds created by a warning device not operating continuously for more than five minutes;
 - 4) Sounds created by emergency equipment for emergency work necessary in the interests of law enforcement or for the health, safety, and welfare of the community;
 - 5) Sounds created by auxiliary equipment operated on watercraft for the purposes of dredging, pile driving, operation of a marina, clam and oyster harvesting are exempt; however, such operations are not exempt from requirements of Section 6.
- c. The provisions of Section 16 shall not apply to motorboats competing under a Mason County or United States Coast Guard permit in a regatta, in a boat race, while on trial runs, or while on official trails or speed record during the time and in the designated area authorized by the permit. In addition, motorboats preparing for an officially sanctioned race or regatta are exempt if authorized by a permit issued by Mason County.
- d. Nothing in these exemptions are intended to preclude Mason County from requiring installation of the best available noise abatement technology consistent with economic feasibility.

Section 18. Enforcement Of Watercraft Noise Standards.

- a. Measurements shall be made with a sound level meter meeting type 1 or type 2 standards as specified in the American Standards Institute Specifications S1.4-1971 to document violations for final enforcement actions under measurement procedures established in Sections 19 through 24.
- b. Any law enforcement officer or noise control enforcement personnel shall be competent in the use of sound measuring equipment. The personnel shall be trained by the Sheriff's Department, or by a person certified by a state agency, in the use of watercraft sound level measurement procedures established in Sections 19 through 26. Any enforcement personnel who by use of the initial inspection procedure of Section 25 suspects that a watercraft may be in violation of the standards of this ordinance, shall require the operator to submit to a measurement of the sound level of the watercraft according to the procedures of Sections 19 through 26; provided, that the enforcement personnel shall have discretion in determining whether measurement would

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occur under unsafe conditions. Weather, water conditions, operator competence, and similar considerations shall be taken into account. If conditions are unsafe, measurement shall not be required. Shoreline measurements shall be made under any conditions, except as provided in Section 21, "Ambient Conditions."

- c. Any operator who fails to comply with the directive to submit to a sound level measurement shall be in violation of this ordinance.
- d. Any person operating a watercraft found in violation of the established noise levels of this ordinance shall be subject to a civil penalty not to exceed one hundred (\$100.00) per day of violation.
- e. Any seller, importer, or manufacturer who violates the standards in Section 16 shall be subject to a civil penalty not to exceed one hundred (\$100.00). Each watercraft or engine offered for sale or sold shall constitute a separate violation.

Section 19. Instrumentation. The following instrumentation and equipment shall be used for the measurement procedures established in this ordinance:

- a. **Sound Level Meter.** The sound level meter shall meet the Type 1, Type 2, and Type 3 requirements of ANSI S1.4-1971. The meter weighing and response mode will be set as required in the specific procedure used. The sound level meter shall be returned to the manufacturer or a qualified laboratory at least once a year, to be calibrated to standards traceable to the National Bureau of Standards. Type 1, Type 2, and Type 3 sound level meters shall be used for any initial inspection procedures, but only Type 1 or Type 2 sound level meters shall be used for the measurement of sound levels for enforcement purposes.
- b. **Sound Level Calibrator.** An acoustically coupled calibrator shall be used periodically to assure the accuracy of the sound level meter and microphone. The calibrator shall be returned to the manufacturer or a qualified laboratory at least once a year to be calibrated to standards traceable to the National Bureau of Standards.
- c. **Tachometer.** The tachometer shall be either one of two types: electric or vibrating reed. The electric tachometer shall be an inductive pickup type for easy attachment to any spark plug cable, contain its own internal power supply, and shall meet SAE J197 specification for power off-road electric tachometers. The vibrating reed tachometer shall be designed for use on any internal combustion engine. Calibration accuracy for both types of tachometers shall be at least ± 3 percent of full scale reading. All tachometers shall be calibrated at least once a year in accordance with the manufacturer's calibration procedures.
- d. **Windscreen.** A windscreen of open cell foam, cloth, or other acoustically invisible material as shall be provided by the manufacturer, shall be placed over the microphone to protect it from moisture, exhaust gases and wind effects.
- e. **Anemometer.** An anemometer shall be used periodically during measurements to test the wind speed.

Section 20. Ambient Conditions. The following ambient conditions shall be observed during measurements and shall determine whether testing is to occur or not:

- a. **Wind.** Sound level measurements shall not be made when the wind speed is in excess of:
 - 1) Twenty mph (32 km/hr) for the close proximity test, Section 25;
 - 2) Twelve mph (19 km/hr) for all other tests.

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- b. **Precipitation.** Sound level measurement shall not be made when precipitation is falling in such a way as to affect the equipment or the measurement readings.
- c. **Background Sound Level.** Sound level measurements shall not be when the difference between the background sound level and the level of the measured sound source is less than 10 dBA, unless the measurement personnel are technically qualified to logarithmically subtract the background level from the measured source's sound level.

Section 21. Measurement Equipment Preparation And Use.

- a. **Battery Check.** A battery check shall be conducted on all instruments before field calibration and measurement.
- b. **Calibration.** Sound level meters shall be field calibrated (using procedures described in the manufacturer's instruction manual) at the beginning and end of each measurement period, and at intervals not exceeding two-hour period.
- c. **Microphone Orientation.** The microphone shall be oriented with respect to the sound source as described in the manufacturer's instruction manual.

Section 22. Equipment Variation Allowances. Due to unavoidable variations in measurement sites and test instruments, the following allowances shall be made for the respective sound level meters:

± 1 dBA	for Type 1 sound level meters
± 2 dBA	for Type 2 sound level meters

This tolerance value shall be applied, after all necessary calculations have been made, to the final reported sound level for the measured sound source.

Section 23. Close Proximity Exhaust System Sound Level Measurement Procedure. This section establishes specific procedures for the measurement of sound levels from exhaust systems at a distance of twenty inches (90.5 meters) from the exhaust outlet. The procedures of subsections (c.), (d.) and (e.) of this section shall not be used for exhaust systems which utilize the introduction of water to the exhaust gas flow for the purpose of muffling the exhaust noise levels, or systems which exhaust the gas flow directly into water.

- a. For the purposes of this section "vehicle" means any motor driven contrivance used as a means of transportation or recreation off of public highways.
- b. **Initial Inspection.** An initial inspection of the vehicle exhaust system shall be conducted to determine if the following defects or modifications exist:
 - 1) The absence of a muffler;
 - 2) The presence of a muffler cut-out, bypass, or similar device which is not standard or normal equipment for the exhaust system being inspected;
 - 3) Defects in the exhaust system including, but not limited to, pinched outlets, and holes or rusted through areas of the muffler or pipes;
 - 4) The presence of equipment which will produce accessible or unusual noise from the exhaust system.
- c. If the above defects are observed and are a violation of the muffler integrity standards established for the type of vehicle which is being inspected, then a citation shall be issued in accordance with the enforcement section of this noise ordinance.
- d. An evaluation of the vehicles sound level shall also be made by the enforcement officer, using the human ear as a sensing device.
- e. If the exhaust noise is discernibly louder than the engine noise, or if any of the defects or modifications described above exist but are not violations of applicable regulations, the enforcement

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officer shall request the vehicle operator to submit the vehicle to any measurement procedures described in this ordinance which are applicable to the type of vehicle being inspected. If the operator refuses to submit the vehicle to these measurement procedures, he shall be in violation of this ordinance.

- f. Test Site and Instrumentation Set Up. The test site and instrumentation shall be set up as follows:
- 1) The test site shall be a flat, open area free of large, sound-reflecting surfaces (other than the surface on which the vehicle is resting), such as signboards, buildings, large docks, hillsides, or other vehicles, located within a sixteen-foot (5 meter) radius of the vehicle being tested and the location of the microphone. The vehicle shall not be on a hoist, rack, or over a pit. Testing shall not occur within a shop or building. Nobody shall stand in the measurement area, except the observer and the vehicle operator.
 - 2) The microphone shall be at the same height as the center of the exhaust outlet if possible, but not closer to any surface than eight inches (0.2 meter). The microphone shall be positioned with its longitudinal axis parallel to the ground, twenty \pm one inches (0.5 meter) from the edge of the exhaust outlet, and forty-five \pm ten degrees from the axis of the outlet. For exhaust outlets located inboard from the vehicle body, the microphone shall be located at the above specified angle and at least eight inches (0.2 meter) from the nearest part of the vehicle.
- g. For vehicles provided with exhaust outlets spaced more than twelve inches (0.3 meter) apart, measurements shall be made for each outlet as if it were the only one, and the highest level shall be recorded. If the exhaust outlets are less than twelve inches (0.3 meter) apart, a single measurement shall be made for any one of the outlets.
- h. For vehicles with a vertical exhaust, the microphone shall be placed at a height of forty-eight \pm two inches (1.2 meter). It's axis shall be vertical and oriented upwards. It shall be placed at a distance of twenty \pm one inches (0.5 meter) from the side of the vehicle nearest the exhaust outlet.
- i. For vehicles with the exhaust system outlet near the engine, the engine hood (if one exists) should be closed as much as possible to reduce engine noise.
- j. If a measuring device is attached to the exhaust outlet and microphone to maintain proper distance, insure that no vibrations from the vehicle shall be transmitted to the instrument.
- k. Vehicle Operation. The vehicle shall be operated as follows:
- 1) Controlled Ignition Vehicles. The engine shall be operated at a normal operating temperature with transmission in park or neutral. Sound level measurements shall be made at three-fourths (75 percent) of the RPM for rated horsepower \pm one hundred RPM of meter reading.
 - 2) Vehicles with Motorcycle Engines. The engine shall be operated at normal operating temperatures with the transmission in neutral. If no neutral is provided, the vehicle shall be operated either with the rear wheel or wheels two to four inches (5-10 centimeters) clear of the ground, or with the drive chain or belt removed. The sound level measurement shall be made with the engine speed stabilized at one of the following values:

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- a) If the engine data is available, test the vehicle at one-half (50 percent) of the RPM for maximum rated horsepower \pm one hundred RPM.
 - b) If the engine data is not available, and if the vehicle has a tachometer showing the manufacturer's recommended maximum engine speed ("Red Line"), test the vehicle at sixty percent of the "Red Line" RPM \pm one hundred RPM.
 - c) If the engine data and red line RPM are not available, test the vehicle at:
 - (1) Three thousand five hundred \pm one hundred RPM for engines with total cylinder displacement between zero to nine hundred fifty cc (0-58 in.).
 - (2) Two thousand eight hundred RPM \pm one hundred RPM for engines with total cylinder displacement greater than nine hundred fifty cc (58 in.).
 - (3) Diesel Engine Vehicles. The engine shall be operated at normal operating temperatures with transmission in park or normal operating temperatures with transmission in park or neutral. Sound level measurements shall be made at the vehicle's maximum governed no-load speed. If the engine is not provided with a governor, the vehicle shall be operated in the same manner as a vehicle with a controlled ignition.
1. Measurement. The exhaust system sound level shall be measured as follows:
- 1) The sound level meter shall be set for slow response and on the "A" weighing scale.
 - 2) The sound level meter shall be observed during the full cycle of engine acceleration-deceleration. The recorded sound level shall be the highest value obtained at the appropriate, constant engine speed as specified in subsection (d.) of this section, and shall exclude peaks due to unrelated ambient noise, engine noise, or extraneous impulsive-type noise.
 - 3) At least two measurements shall be made, and the reported sound level shall be the average of the two highest readings which are within one dBA of each other.

Section 24. Watercraft Sound Level Measurement Procedure. This section establishes specific procedures for the measurement of watercraft sound levels.

- a. Initial Inspection. An initial inspection may be made to determine if the watercraft shall be required to undergo the pass-by measurement described in subsections (cc.) (c.), and (d.) of this section.
 - 1) A Type 3 or better sound level meter shall be used to measure the sound level of any watercraft. The

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- microphone shall be located in a boat or on a dock and no closer than (2) two feet from any surface of the boat or dock.
- 2) The watercraft shall be measured as it passes at a distance not less than (50) fifty feet from the microphone.
 - 3) The enforcement officer shall require the watercraft operator to submit to a pass-by or exhaust system sound level measurement if the initial inspection level is within 2 dBA or, or greater than, the levels established in Section 16.
- b. Test Site and Instrumentation Set-up. The test site and instrumentation shall be set up as follows:
- 1) The test site shall be a calm body of water, large enough to allow full-speed pass-bys. The area around the microphone and boat shall be free of large obstructions, other than the deck or platform on which the microphone is standing, such as buildings, boats, hills, large piers, breakwater, etc., for a minimum distance of one hundred feet (30 meters). Three markers (buoys or posts) shall be placed in line, fifty feet (15 meters) apart, to mark the course the boat is to follow while being tested.
 - 2) The sound level meter shall be a Type 2 or better. The microphone shall be placed fifty feet (815 meters) from the line determined by the three markers, normal to the line and opposite the center marker. It shall also be placed four to five feet (1.2-1.5 meters) above the water surface and no closer than two feet (0.6 meter) from the surface of the deck or platform on which the microphone stands, as near to the end of the deck or platform as possible or overhanging the end of the deck or platform as possible.
- c. Watercraft Operation. The watercraft shall pass within one to three feet (0.2-0.9 meter) on the far side of all three markers, on a straight course.
- 1) Watercraft which weigh less than seven thousand pounds gross weight shall be operated according to the following procedure. The watercraft shall approach the first marker, the engine shall be immediately accelerated to its full throttle RPM range. The watercraft shall continue to accelerate until its bow passes the third marker.
 - 2) Watercraft which weigh less than seven thousand pounds or more gross weight shall be operated at the midpoint of the manufacturer's recommended maximum continuous (or "cruise") RPM range, \pm one hundred RPM. The watercraft shall be at this speed when it passes the first marker, and shall continue to operate at this speed until its bow passes the third marker.
- d. Measurement. The watercraft sound level shall be measured as follows:
- 1) The sound level meter shall be set for fast response and on the "A" weighing scale.
 - 2) The meter shall be observed during the entire pass-by. The applicable reading shall be the sound level obtained as the stern of the watercraft passes the middle marker. Peaks due to unrelated ambient noise, water noise from waves or wakes, propeller cavitation noise, or extraneous impulsive-type noise shall be excluded. At least two measurements shall be made for each side of the watercraft. All values shall be recorded.
 - 3) The sound level for each side of the watercraft shall be the average of the two highest readings which are within 1

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dBa of each other, rounded to the nearest 0.5 dBA. The reported sound level shall be that of the loudest side of the watercraft.

- e. New watercraft shall be tested according to the specifications of the SAE J34 measurement procedure.

Section 25. Measurement Of Sound-Measurements Deemed Accurate--When. If the measurement of sound is made with a sound level meter, it shall be an instrument in good operating condition and shall meet the requirements for a Type I, S1A, Type II or S2A instrument, as described in American National Standards Institute Specifications, Section 1.4-1971. The sound level meter shall be calibrated before and after each noise complaint investigation. The calibration device shall be periodically tested for accuracy. Records shall be kept of such calibration and testing, and filed with the Mason County Sheriff's Department, and if it appears from such records that the calibrator has been regularly tested and that the sound level meter has been calibrated properly before the reading, the reading shall be deemed accurate. Failure to make such records shall not create any presumption or be admissible for any purpose in any proceeding for enforcement of the ordinance.

Section 26. Receiving Properties Within More Than One District. Where a receiving property lies within more than one EDNA, the maximum permissible sound level shall be determined by the EDNA within which the measurement is made. The enforcing officer shall make the measurement on receiving property in the following order of preference: Class A EDNA, Class B EDNA, Class C EDNA.

Section 27. Authority Of Sheriff. The Mason County Sheriff is authorized and directed to administer and enforce the provisions of this ordinance. Upon request by the Sheriff or his deputies, all other county departments and divisions, including the Mason County Board of Health are authorized to assist them in enforcing this ordinance. The Sheriff is authorized to assist Mason County Health Department enforcement of any subsequent noise control ordinance adopted by the department.

Section 28. Duties of Sheriff. The duties of the Sheriff shall include, but are not limited to:

- a. Enforcement of the provisions of this ordinance except as provided in Section 30;
- b. Training Deputy Sheriffs as field inspectors;
- c. Purchasing measuring instruments and training deputies in their calibration and use;
- d. Investigating citizens' noise complaints;
- e. Assisting citizens and county departments in evaluating and reducing the noise impact of their activities;
- f. Reviewing at least every three years the provisions of this ordinance and recommending revisions consistent with technology to reduce noise.

Section 29. Commercial And Industrial Noise Enforced By State. With the exception of public disturbance, motor vehicle and watercraft noise as treated in Sections 12, 13 and 16, noises created by industrial and commercial sources are to be enforced by the State of Washington until local regulation governing such noises are in effect.

Section 30. Enforcement By Qualified Personnel. Except as provided in Section 29, noise complaints may be investigated, and the public disturbance provisions of this ordinance may be enforced by the Mason County Sheriff or any duly appointed Deputy Sheriff. Subject to Section 29, the maximum permissible noise level provisions of this ordinance may be enforced by the Sheriff or any Deputy Sheriff if qualified to operate a sound level meter.

Section 31. Civil Penalty. In addition to or an alternative to any other judicial or administrative remedy provided by law or other regulation, resolution, ordinance or this ordinance, any person who violates any provision in this ordinance, or by each act of commission or omission procures, aids or abets such violation shall be subject to a civil penalty in an amount of thirty (\$30.00) for the first such violation. The penalty shall be one hundred

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(\$100.00) for the second such violation and two hundred fifty (\$250.00) for the third and each subsequent violation of the same regulation within any one-year period.

Section 32. Misdemeanor. In addition to or as an alternative to any other judicial or administrative remedy provided by law or other regulation, resolution or ordinance, any person who:

- a. Violates any provision of this ordinance, or by each act of commission or omissions procures, aids, or abets such violation; and who
- b. Refuses to stop and/or abate such violation when it is reasonably within his power to do so;
- c. When so requested by a properly identified Sheriff, Deputy Sheriff, or other law enforcement officer; shall be guilty of a misdemeanor and punished as provided in Mason County Ord.767.

This section shall be in addition to or alternative to any other penalty provided by law or failure to obey the lawful demands of a law enforcement officer.

Section 33. Abatement Proceedings--Legal Relief. Notwithstanding the existence or use of any other remedy, an officer may, through the Mason County Prosecuting Attorney, seek legal or equitable relief to enjoin any acts or practices or abate any conditions which constitute or will constitute a violation or any provision of this ordinance.

Section 34. Ordinance Additional To Other Law. The provisions of this ordinance shall be cumulative and nonexclusive and shall not affect any other claim, cause of action or remedy; nor, unless specifically provided, shall it be deemed to repeal, amend or modify any law, ordinance or regulation relating to noise, but shall be deemed additional to existing legislation and common law on noise.

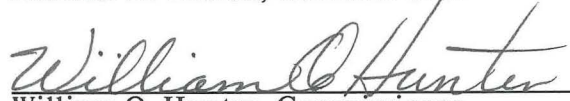
Section 35. Severability. If any portion of this ordinance to its application to any person or circumstance is held invalid, the remainder of this ordinance or its application of any provisions to other persons or circumstances is not affected.

DATED and to become effective this 27th day of June, 1989.

BOARD OF COUNTY COMMISSIONERS
MASON COUNTY, WASHINGTON


Annette S. McGee, Chairperson

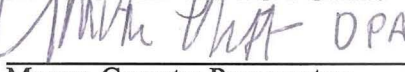

Michael D. Gibson, Commissioner


William O. Hunter, Commissioner

ATTEST:


Clerk of the Board

APPROVED AS TO FORM:


Mason County Prosecutor