

ILLINOIS POLLUTION CONTROL BOARD
February 3, 1977

IN THE MATTER OF)
) R74-10
MOTOR VEHICLE NOISE REGULATIONS)
)

ORDER OF THE BOARD (by Mr. Dumelle):

The following is proposed as a Proposed Final Draft subject to public comment in accordance with Procedural Rule 211 until March 25, 1977.

1. Amend Rule 101 of Chapter 8: Noise Regulations by adding the following definitions:
 - (a) Antique vehicle: a motor vehicle that is more than 25 years of age or a bona fide replica thereof and which is driven on the highways only going to and returning from an antique auto show or an exhibition, or for servicing or demonstration, or a fire-fighting vehicle more than 20 years old which is not used as fire-fighting equipment but is used only for the purpose of exhibition or demonstration.
 - (b) Bus: every motor vehicle designed for carrying more than 10 passengers and used for the transportation of persons; and every motor vehicle, other than a taxicab, designed and used for the transportation of persons for compensation.
 - (c) Cutout, bypass or similar device: a device which varies the exhaust system gas flow so as to discharge any exhaust gas and acoustic energy to the atmosphere without passing through the entire length of the exhaust system including all exhaust system sound attenuation components.
 - (d) Dealer: every person engaged in the business of selling vehicles to persons who purchase such vehicles for purposes other than resale, and who has an established place of business for such activity in this state.

- (e) Exhaust system: the system comprised of a combination of components which provides for the enclosed flow of exhaust gas from engine parts to the atmosphere.
- (f) Farm tractor: every motor vehicle designed and used primarily as a farm implement for drawing wagons, plows, mowing machines and other implements of husbandry, and every implement of husbandry which is self propelled.
- (g) Fast meter response: as specified by American National Standards Institute in document S1.4-1971, or subsequent revisions.
- (h) Gross Vehicle Weight (GVW): the maximum loaded weight for which a motor vehicle is registered or, for vehicles not so registered, the value specified by the manufacturer as the loaded weight of the vehicle.
- (i) Highway: the entire width between the boundary lines of every way publicly maintained when any part thereof is open to the use of the public for purposes of vehicular travel.
- (j) Motorcycle: every motor vehicle having a seat or saddle for the use of the rider and designed to travel on not more than 3 wheels in contact with the ground, but excluding a tractor.
- (k) Motor driven cycle: every motorcycle, motor scooter, or bicycle with motor attached, with less than 150 cubic centimeter piston displacement.
- (l) Motor vehicle: every vehicle which is self-propelled and any combination of vehicles which are propelled or drawn by a vehicle which is self-propelled.
- (m) Muffler: a device for abating the sounds of escaping gases of an internal combustion engine.
- (n) New motor vehicle: a motor vehicle the equitable or legal title to which has never passed to a person who purchases it for purposes other than resale.
- (o) Passenger car: a motor vehicle designed for the carrying of not more than ten persons, including a multi-purpose passenger vehicle, except any motor vehicle of the second division as defined in I.R.S. ch. 95-1/2, Section 1-146, and except any motorcycle or motor driven cycle.

- (p) Registered: a vehicle is registered when a current registration certificate or certificates and registration plates have been issued for it under the laws of any state pertaining to the registration of vehicles.
- (q) Snowmobile: a self-propelled device designed for travel on snow or ice or natural terrain steered by skis or runners, and supported in part by skis, belts, or cleats.
- (r) Special mobile equipment: every vehicle not designed or used primarily for the transportation of persons or property and only incidentally operated or moved over a highway, including but not limited to: ditch digging apparatus, well boring apparatus and road construction and maintenance machinery such as asphalt spreaders, bituminous mixers, bucket loaders, tractors other than truck tractors, ditchers, levelling graders, finishing machines, motor graders, road rollers, scarifiers, earth moving carry alls and scrapers, power shovels and drag lines, and self-propelled cranes and earth moving equipment.
- (s) Tactical military vehicle: every vehicle operated by any federal or state military organization and designed for use in field operations, but not including vehicles such as staff cars and personnel carriers designed primarily for normal highway use.
- (t) Used motor vehicle: a motor vehicle that is not a new motor vehicle.
- (u) Vehicle: every device in, upon or by which any person or property is or may be transported or drawn upon a highway.

2. Amend Rule 102 of Chapter 8: Noise Regulations to read:

Rule 102: PROHIBITION OF NOISE POLLUTION

No person shall cause or allow the emission of sound beyond the boundaries of his property, as property is defined in Section 25 of the Illinois Environmental Protection Act, so as to cause noise pollution in Illinois, or so as to violate any provision of this chapter.

3. Amend Rule 103 of Chapter 8: Noise Regulations by substituting the following:

Rule 103: MEASUREMENT PROCEDURES

(a) Procedures Applicable to All of Chapter 8

The Agency may adopt procedures which set forth criteria for the measurement of sound. Such procedures shall be in substantial conformity with standards and recommended practices established by the American National Standards Institute, Inc. (ANSI) or the Society of Automotive Engineers, Inc. (SAE), and the latest revisions thereof, including ANSI S1.1-1960, ANSI S1.8-1969, ANSI S1.2-1962, and SAE J-1847. Such procedures shall be revised from time to time to reflect current engineering judgment and advances in noise measurement techniques. Such procedures, and revisions thereof, shall not become effective until filed with the Index Division of the Office of the Secretary of State as required by "An Act concerning administrative rules," approved June 14, 1951, as amended.

(b) Procedures Applicable only to Part 2 of Chapter 8

Measurement procedures to determine whether emissions of sound comply with Part 2 shall be in substantial conformity with ANSI S1.6-1967, ANSI S1.4-1971--Type I Precision, ANSI S1.11-1966, and ANSI S1.13-1971 Field Method.

(c) Procedures Applicable only to Part 3 of Chapter 8

(1) Measurement procedures to determine whether emissions of sound comply with Rules 310-313 of Part 3 shall be in substantial conformity with ANSI S1.4-1971--Type I Precision or Type II General Purpose, and ANSI S1.13-1971 Field Method, provided that procedures for measurement under Rule 313 shall be in substantial conformity with those established by the U.S. Department of Transportation pursuant to Section 18 of the Federal Noise Control Act of 1972.

(2) The Agency may provide for measurement at distances other than the 50 feet specified in Rules 310 through 313, provided that correction factors are applied so that the sound levels so determined are substantially equivalent to those measured at 50 feet and the measurement distance does not exceed 100 feet. The correction factors used shall be consistent with California Highway Patrol Sound Measurement Procedures HPH 83.1.

(3) Measurements to determine compliance with Rules 310 and 312 shall be made only in locations where motor vehicles are operating on grades of less than 3%.

4. Add a new Part 3 to Chapter 8: Noise Regulations as follows:

PART 3--SOUND EMISSION STANDARDS AND LIMITATIONS FOR MOTOR VEHICLES

SUBPART A--EQUIPMENT STANDARDS APPLICABLE TO ALL MOTOR VEHICLES

Rule 301: EXHAUST SYSTEM

- (a) No person shall operate or cause or allow the operation of a motor vehicle unless the exhaust system of such vehicle is
- (1) equipped with a muffler or other sound dissipative device;
 - (2) free from defects which affect sound reduction; and
 - (3) not equipped with any cutout, bypass or similar device.
- (b) No person shall install any parts in or otherwise modify the cooling, intake or exhaust system of a motor vehicle in a manner which will amplify or increase the sound level emitted by that vehicle above the level emitted by such vehicle with the equipment originally installed on the vehicle, so as to produce excessive or unusual noise. No person shall operate or cause or allow the operation of a motor vehicle which has been so modified.
- (c) No person shall sell any parts for the cooling, intake or exhaust system of a motor vehicle when he knows or has reason to know that the parts are to be installed on a vehicle on which they will amplify or increase the sound level emitted by that vehicle above the level emitted by such vehicle with the equipment originally installed on the vehicle, so as to produce excessive or unusual noise.

Rule 302: TIRES

No person shall operate or cause or allow the operation of a motor vehicle with one or more tires having a tread pattern which is composed primarily of cavities in the tread (excluding sipes and local chunking) which are not vented by grooves to the tire shoulder or circumferentially to each other around the tire.

Rule 303: INSPECTIONS

No certificate of safety shall be issued for any motor vehicle of a type subject to safety inspection in this State unless it complies with the requirements of Subpart A of this Part.

SUBPART B--OPERATIONAL STANDARDS

Rule 310: STANDARDS APPLICABLE TO ALL PASSENGER CARS AND TO OTHER MOTOR VEHICLES WITH GVW OF ZERO TO 8,000 POUNDS

(a) Applicability

This Rule 310 shall apply to all passenger cars regardless of weight and to other motor vehicles with a gross vehicle weight of zero to 8,000 pounds, except motorcycles and motor driven cycles.

(b) Standards for Highway Operation

No person shall operate or cause or allow the operation of a motor vehicle subject to this Rule at any time under any conditions of load, acceleration or deceleration in such a manner as to exceed the following limits:

(1) On highways with speed limits of 35 miles per hour or less, 74 dB(A), when operating on a grade of less than 3%, measured with fast meter response at 50 feet from the centerline of lane of travel, or an equivalent sound level limit measured in accordance with procedures established under Rule 103;

(2) On highways with speed limits of more than 35 miles per hour, 82 dB(A), or 85 dB(A) if the vehicle is equipped with two or more snow or mud/snow tires, measured with fast meter response at 50 feet from the centerline of lane of travel, or an equivalent sound level limit measured in accordance with procedures established under Rule 103.

Rule 311: STANDARDS APPLICABLE TO MOTOR VEHICLES WITH GVW IN EXCESS OF 8,000 POUNDS

(a) Applicability

This Rule 311 shall apply to motor vehicles with a gross vehicle weight in excess of 8,000 pounds, except passenger cars.

(b) Standards for Highway Operation

No person shall operate or cause or allow the operation of a motor vehicle subject to this Rule at any time under any conditions of highway grade, load, acceleration or deceleration in such a manner as to exceed the following limits:

(1) On highways with speed limits of 35 miles per hour or less, 86 dB(A), measured with fast meter response at 50 feet from the centerline of lane of travel, or an equivalent sound level limit measured in accordance with procedures established under Rule 103;

(2) On highways with speed limits of more than 35 miles per hour, 90 dB(A) measured with fast meter response at 50 feet from the centerline of lane of travel, or an equivalent sound level limit measured in accordance with procedures established under Rule 103.

(c) Standard for Operation under Stationary Test

No person shall operate or cause or allow the operation of a motor vehicle subject to this Rule, powered by an engine with engine speed governor, which generates a sound level in excess of 88 dB(A) measured with fast meter response at 50 feet from the longitudinal centerline of the vehicle or an equivalent sound level limit measured in accordance with procedures established under Rule 103, when that engine is accelerated from idle with wide open throttle to governed speed with the vehicle stationary, transmission in neutral, or clutch engaged.

Rule 312: STANDARDS APPLICABLE TO MOTORCYCLES AND MOTOR DRIVEN CYCLES

(a) Applicability

This Rule 312 shall apply to all motorcycles and motor driven cycles.

(b) Standards for Highway Operation

No person shall operate or cause or allow the operation of a motor vehicle subject to this Rule at any time or under any conditions of load, acceleration or deceleration in such a manner as to exceed the following limits:

(1) On highways with speed limits of 35 miles per hour or less, 78 dB(A), when operating on a grade of less than 3%, measured with fast meter response at 50 feet from the centerline of lane of travel, or an equivalent sound level limit measured in accordance with procedures established under Rule 103;

(2) On highways with speed limits of more than 35 miles per hour, 86 dB(A) measured with fast meter response at 50 feet from the centerline of lane of travel, or an equivalent sound level limit measured in accordance with procedures established under Rule 103.

Rule 313: EXCEPTION FOR AND STANDARDS APPLICABLE TO MOTOR CARRIERS ENGAGED IN INTERSTATE COMMERCE WITH RESPECT TO OPERATIONS REGULATED PURSUANT TO THE FEDERAL NOISE CONTROL ACT OF 1972.

(a) Applicability

(1) After the effective date of the federal standards contained in 40 Code of Federal Regulations (CFR) Part 202, this Rule 313 shall apply to motor carriers engaged in interstate commerce with respect to noise emissions regulated by such federal standards. Motor carrier operations determined pursuant to Rule 104 to be governed by this Rule shall be excepted from Rules 301, 302, and 311.

(2) This Rule shall apply to motor carriers with respect only to the operation of those motor vehicles of such carriers which have a gross vehicle weight rating or gross combination weight rating in excess of 10,000 pounds, and only when such motor vehicles are operated under the conditions specified below.

(3) Except as provided in subparagraph (4) of this paragraph (a), this Rule shall apply to the total sound produced by such motor vehicles when operating under the specified conditions, including the sound produced by auxiliary equipment mounted on such motor vehicles.

(4) This Rule shall not apply to auxiliary equipment which is normally operated only when the transporting vehicle is stationary or is moving at a speed of 5 miles per hour or less. Examples of such equipment include, but are not limited to, cranes, asphalt spreaders, ditch diggers, liquid or slurry pumps, air compressors, welders, and refuse compactors.

(b) Equipment Standards

(1) Visual exhaust system inspection. No motor carrier subject to this Rule shall operate any motor vehicle of a type with respect to which this Rule is applicable unless the exhaust system of such vehicle is (a) equipped with a muffler or other noise dissipative device; (b) free from defects which affect sound reduction; and (c) not equipped with any cutout, bypass or similar device.

(2) Visual tire inspection. No motor carrier subject to this Rule shall operate any motor vehicle of a type with respect to which this Rule is applicable on a tire or tires having a tread pattern which as originally manufactured, or as newly retreaded, is composed primarily of cavities in the tread (excluding sipes and local chunking) which are not vented by grooves to the tire shoulder or circumferentially to each other around the tire. This subparagraph (2) shall not apply to any motor vehicle which is demonstrated by the motor carrier which operates it to be in compliance with the noise emission standard specified in paragraph (c) of this Rule for operations on highways with speed limits of more than 35 MPH, if the demonstration is conducted at the highway speed limit in effect at the inspection location or, if speed is unlimited, the demonstration is conducted at a speed of 65 MPH.

(c) Standards for Highway Operation

No motor carrier subject to this Rule shall operate any motor vehicle of a type with respect to which this Rule is applicable and which at any time or under any condition of highway grade, load, acceleration or deceleration generates a sound level in excess of 86 dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of 35 MPH or less; or 90 dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of more than 35 MPH.

(d) Standard for Operation under Stationary Test

No motor carrier subject to this Rule shall operate any motor vehicle of a type with respect to which this Rule is applicable, and which is equipped with an engine speed governor, which generates a sound level in excess of 88 dB(A) measured on an open site with fast meter response at 50 feet from the longitudinal centerline of the vehicle, when its engine is accelerated from idle with wide open throttle to governed speed with the vehicle stationary, transmission in neutral, and clutch engaged.

(e) Additional Definitions Applicable Only to Rule 313

(1) Common carrier by motor vehicle: any person who holds himself out to the general public to engage in the transportation by motor vehicle in interstate or foreign commerce of passengers or property or any class or classes thereof for compensation, whether over regular or irregular routes.

(2) Contract carrier by motor vehicle: any person who engages in transportation by motor vehicle of passengers or property in interstate or foreign commerce for compensation (other than transportation referred to in subparagraph (1) of this paragraph) under continuing contracts with one person or a limited number of persons either (1) for the furnishing of transportation services through the assignment of motor vehicles for a continuing period of time to the exclusive use of each person served or (2) for the furnishing of transportation services designed to meet the distinct need of each individual customer.

(3) Gross combination weight rating: the value specified by the manufacturer as the loaded weight of a combination vehicle.

(4) Gross vehicle weight rating: the value specified by the manufacturer as the loaded weight of a single vehicle.

(5) Interstate commerce: the commerce between any place in a State and any place in another State or between places in the same State through another State, whether such commerce moves wholly by motor vehicle or partly by motor vehicle and partly by rail, express, water or air. This definition of "interstate commerce" for purposes of this Rule is the same as the definition of "interstate commerce" in Section 203(a) of the Interstate Commerce Act (49 U.S.C. Section 303(a)).

(6) Motor carrier: a common carrier by motor vehicle, a contract carrier by motor vehicle, or a private carrier of property by motor vehicle as those terms are defined by paragraphs (14), (15), and (17) of Section 203(a) of the Interstate Commerce Act (49 U.S.C. 303(a)). The term "motor carrier" includes those entities which own and operate the subject motor vehicles, but not the drivers thereof, unless said drivers are independent truckers who both own and drive their own vehicles.

(7) Open site: an area that is essentially free of large sound-reflecting objects, such as barriers, walls, board fences, signboards, parked vehicles, bridges or buildings.

(8) Private carrier of property by motor vehicle: any person not included in terms "common carrier by motor vehicle" or "contract carrier by motor vehicle", who transports in interstate or foreign commerce by motor vehicle property of which such person is the owner, lessee, or bailee, when such transportation is for sale, lease, rent or bailment, or in furtherance of any commercial enterprise.

Rule 314: HORNS AND OTHER WARNING DEVICES

(a) No person shall sound a horn when upon a highway, except when reasonably necessary to insure safe operation. No person shall sound any horn of any motor vehicle for an unreasonable period of time or in a manner so as to circumvent enforcement of the operational standards contained in Subpart B of this Part.

(b) No person shall sound any siren, whistle or bell of any motor vehicle except as provided in I.R.S. ch. 95-1/2, Section 12-601(b).

Rule 315: TIRE NOISE

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 this provision.

SUBPART C--STANDARDS FOR REGISTRATION AND LABELLING OF MOTOR VEHICLES PURCHASED FROM DEALERS

Rule 320: REGISTRATION OF USED MOTOR VEHICLES

No used motor vehicle sold by a dealer shall be registered for use on the highways in Illinois unless the application(s) for title transfer and registration includes a certification by the dealer that the vehicle complies with the rules contained in Subpart A of this Part.

Rule 321: LABELLING OF USED MOTOR VEHICLES

No dealer shall offer any used motor vehicle for sale which is not entitled to registration under Rule 320 unless such vehicle is so labelled. The label must be placed on the vehicle windshield and must inform all offerors, in conspicuous type, that the vehicle as offered does not comply with Pollution Control Board rules and may not be registered in Illinois for use on the highways of this State.

SUBPART D--EXCEPTIONS, COMPLIANCE DATES, AND PENALTIES FOR PART 3

Rule 330: EXCEPTIONS

(a) The standards and limitations of Part 3 shall not apply to:

- (1) any vehicle moved by human or animal power
- (2) any vehicle moved by electric power
- (3) any vehicle used exclusively upon stationary rails or tracks
- (4) any farm tractor
- (5) any antique vehicle
- (6) any snowmobile
- (7) any special mobile equipment
- (8) any vehicle while being used lawfully for racing competition or timed racing events; and
- (9) any lawn care maintenance equipment

(b) Rule 301(c) shall not apply to any sale of parts which the seller can show were shipped in interstate commerce to a purchaser outside of Illinois.

(c) Rules 302 and 313(b)(2) shall not apply to any person who can show that a tread pattern as described in those Rules was the result of wear and that the tire was not originally manufactured or newly retreaded with such a tread pattern.

(d) The operational standards contained in Rules 310-313 inclusive shall not apply to warning devices, such as horns and sirens; or to emergency equipment and vehicles such as fire engines, ambulances, police vans, and rescue vans, when responding to emergency calls; to snow plows when in operation; or to tactical military vehicles.

Rule 331: COMPLIANCE DATES FOR PART 3

(a) Except as otherwise provided in this Rule 331, any person subject to the standards and limitations of Part 3 of this Chapter shall comply with such standards and limitations on and after 6 months from the effective date of this Part.

(b) Every owner or operator of a motor vehicle subject to Rule 302 shall comply with such Rule on and after one year from the effective date of this Part.

(c) Every owner or operator of a motor vehicle subject to Rule 310(b)(2) or 311(b)(2) shall comply with such Rule on and after one year from the effective date of this Part.

(d) Every motor carrier subject to Rule 313 shall comply with such Rule on and after the effective date of this Part.

(e) Rule 320 shall become effective thirty days after the date on which appropriate certification forms are available from the Secretary of State.

Rule 332: PENALTIES FOR PART 3


The money penalty for a first individual vehicle violation (or a second violation if more than one year after any previous violation by the same person) of any provision of Board Regulations, Ch. 8, Part 3, Sound Emission Standards and Limitations for Motor Vehicles, shall be limited to a maximum fine of \$20.

5. Amend existing Rule 208 of Chapter 8: Noise Regulations by adding the following:

(f) Rules 202 through 207 inclusive shall not apply to the operation of any vehicle registered for highway use while such vehicle is being operated within any land used as specified by Rule 201 of this Chapter in the course of ingress to or egress from a highway.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Proposed Final Draft was authorized for publication and public comment on the 3RD day of February, 1977 by a vote of 5-0.


Christan L. Moffett, Clerk
Illinois Pollution Control Board