

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

**PART 903
RULES AND REGULATIONS FOR THE CONTROL OF NOISE FROM MOTOR
RACING FACILITIES**

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APPENDIX A OLD RULE NUMBERS REFERENCED

AUTHORITY: Implementing Section 25 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1025 and 1027).

SOURCE: Adopted at 2 Ill. Reg. 27, p. 233, effective June 26, 1978; codified at 7 Ill. Reg. 13579.

SUBPART A: OPERATIONAL PROCEDURES AND RACING WITHOUT MUFFLERS

Section 903.101 Operational Procedures

The owner or operator of a motor racing facility shall reduce noise emissions from the public address system by using noise abatement methods and operational changes -- for example, by reducing the volume of the loudspeaker system, by increasing the number of speakers so that the volume of individual speakers can be further reduced, and by relocating and redirecting the speakers away from residential property.

Section 903.102 Racing Vehicles without Mufflers

No person shall cause or allow the use or operation of any motor racing vehicle that does not require a muffler in accordance with this Part in any motor racing event started after 10:30 p.m. local time on any particular weekday or after 11:00 p.m. local time on any particular weekend day.

SUBPART B: DRAG RACING FACILITIES

Section 903.120 Muffler Requirements

- a) No person shall cause or allow the use or operation of any drag racing vehicle equipped with a normally aspirated gasoline burning engine at a

drag racing facility unless such drag racing vehicle is equipped with a well-maintained and properly installed muffler. Except for any motorcycle used as a drag racing vehicle, all mufflers required in accordance with this subparagraph (a) shall meet the requirements specified in subparagraph (b).

- b) Except for any motorcycle used as a drag racing vehicle, all mufflers required in accordance with subparagraph (a) shall have noise reducing characteristics which will produce a reduction in total vehicle noise of at least the amount listed in the following table when such drag racing vehicle is operated in a manner simulating wide-open throttle competition. Such noise reduction shall be determined by using measurement procedures specified in 35 Ill. Adm Code 900.103.

**Total Vehicle Noise Reduction Requirements
for Mufflers Installed on Drag Racing Vehicles
(Except Motorcycles) During Wide-open
Throttle Acceleration Run**

Type of Drag Racing Vehicle	Date	Total Vehicle Noise Reduction dB
Group A	On and after March 15, 1979	Muffler only
Group A	On and after March 15, 1980	10 dB
Group A	On and after March 15, 1983	14 dB
Group B	On and after March 15, 1980	Muffler only
Group B	On and after March 15, 1981	10 dB
Group B	On and after March 15, 1983	14 dB
Group C	On and after March 15, 1981	Muffler only
Group C	On and after March 15, 1982	10 dB
Group C	On and after March 15, 1983	14 dB

- 1) Group A includes all drag racing vehicles in the National Hot Rod Association (NHRA) classes of ET Bracket, Stock and Super Stock; the International Hot Rod Association (IHRA) classes of ET Bracket, Stock and Super Stock; the American Hot Rod Association (AHRA) classes of Selectra, Stock, Super Street and Super Stock; and all other similar drag racing vehicles.
- 2) Group B includes all drag racing vehicles in the NHRA class of Modified; the IHRA class of Super Modified; the AHRA class of Modified/Street; and all other similar drag racing vehicles.

- 3) **Group C includes all drag racing vehicles in the NHRA classes of Competition and Pro Stock; the IHRA classes of Super Comp and Pro Stock; the AHRA classes of Top Competition and Pro Stock; and all other similar drag racing vehicles.**

Section 903.121 Sound Level Measurement Requirements

- a) **The sound emissions from each drag racing vehicle required to have a muffler in accordance with Section 903.120 must be measured before competing in terms of A-weighted sound levels using sound level meters in conformance with American National Standards Institute (ANSI) Standards §1.4 Type 1 or Type 2 requirements and using procedures specified in 35 Ill. Adm. Code 900.103. All sound level measurements must be made with the microphone one-half meter from the exhaust outlet with the engine gear-box in neutral at an engine speed of 4000 rpm. It shall be the responsibility of the drag racing facility's owners or operators, or designated agent, to measure and record the required sound level data. Upon reasonable request, the owner or operator shall make such recorded sound level data available to the Agency. The owner and operator must keep such recorded sound level data for the duration of the racing season.**
- b) **The Agency shall publish techniques for determining compliance with Section 903.120 under static test conditions.**
- c) **On and after March 15, 1979, before any motorcycle racing vehicle required to have a muffler in accordance with Section 903.120 competes at a drag racing facility, the noise emissions from such motorcycle racing vehicle must be measured in terms of A-weighted sound levels using sound level meters in conformance with ANSI Standards §1.4 Type 1 or Type 2 requirements and using procedures specified in 35 Ill. Adm. Code 900.103. The microphone shall be located one-half meter from and in the horizontal plane of the rearmost exhaust outlet at an angle of 45 degrees behind the exhaust outlet and from the normal line of travel of the motorcycle. The engine shall be run with the gear-box in neutral at an engine speed equal to one-half of the manufacturer's-recommended-maximum-engine-speed. If no manufacturer's-recommended- maximum-engine-speed is published for a particular motorcycle, then an engine speed equal to 60 percent of the engine speed at which maximum horsepower is developed shall be used. If no manufacturer's-recommended-maximum-engine-speed is published, then the engine speed during the sound level measurement shall be calculated from either of the following formulae:**

$$\text{Engine Speed} = \underline{306,000}$$

stroke in millimeters

OR

$$\text{Engine Speed} = \frac{12,000}{\text{stroke in inches}}$$

Section 903.122 Sound Emission Limits

On and after March 15, 1979, no person shall cause or allow the use or operation of any motorcycle racing vehicle required to have a muffler in accordance with Section 903.120 whose sound emissions exceed 115 db(A) when measured in accordance with Section 903.121 and when measured one-half meter from the rearmost exhaust outlet.

SUBPART C: OVAL RACING FACILITIES

Section 903.140 Muffler Requirements

- a) Except as provided in subparagraph (b), no person shall cause or allow the use or operation of any oval racing vehicle at an oval racing facility unless such oval racing vehicle is equipped with a well-maintained and properly installed muffler. Except for any motorcycle used as an oval racing vehicle, all mufflers required in accordance with this rule shall meet the requirements specified in subparagraph (c).
- b) The following oval racing vehicles shall not require a muffler in accordance with subparagraph (a);
 - 1) Sprint racing vehicles;
 - 2) Midget racing vehicles;
 - 3) Supercharged oval racing vehicles.
- c) Except for any motorcycle used as an oval racing vehicle, all mufflers required in accordance with subparagraph (a) shall have noise reducing characteristics which will produce a reduction in total vehicle noise of at least the amount listed in the following table when such oval racing vehicle is operated in a manner simulating wide-open throttle competition. Such noise reduction shall be determined by using measurement procedures specified in 35 Ill. Adm. Code 900.103.

**Wide-open Throttle Noise Reduction Requirements
for Mufflers Installed on Oval Racing Vehicles**

(Except Motorcycles)

Date	Muffler Noise Reduction Requirement, dB
On and after March 15, 1979	Muffler only
On and after March 15, 1980	10 dB
On and after March 15, 1982	16 dB

Section 903.141 Sound Level Measurement Requirements

- a) **The requirements for measuring noise emissions from oval racing vehicles, other than motorcycles used as oval racing vehicles, shall be identical to those specified under Section 903.121(a) for drag racing vehicles.**

- b) **The Agency shall publish techniques for determining compliance with Section 903.140 under static test conditions.**

- c) **The requirements for measuring noise emissions from motorcycle racing vehicles competing at oval racing facilities shall be identical to those specified under Section 903.121(c) for motorcycle racing vehicles competing at drag racing facilities.**

Section 903.142 Sound Emission Limits

No person shall cause or allow the use or operation of any motorcycle racing vehicle required to have a muffler in accordance with Section 903.140 whose sound emissions exceed 115 dB (A) when measured in accordance with Section 903.141 and when measured one-half meter from the rearmost exhaust outlet.

SUBPART D: SPORTS CAR RACING FACILITIES

Section 903.160 Muffler Requirements

- a) **Except as provided in subparagraph (b), on and after March 15, 1979, no person shall cause or allow the use or operation of any sports car racing vehicle competing at a sports car racing facility unless such sports car racing vehicle is equipped with a well-maintained and properly installed muffler.**

- b) **The following sports car racing vehicles shall not require a muffler in accordance with subparagraph (a): all sports car racing vehicles which are supercharged.**

Section 903.161 Sound Level Measurement Requirements

During all qualifying runs, noise emissions from each sports car racing vehicle required to have a muffler in accordance with Section 903.160, must be measured in terms of A-weighted sound levels using sound level meters in conformance with ANSI Standards §1.4 Type 1 or Type 2 requirements and using procedures specified in 35 Ill. Adm. Code 900.103. All measurements must consistently be made at the same measurement site; provided, however, that such measurement site can be changed if necessitated by good faith circumstances making the use of the first measurement site impossible or impractical. It shall be the responsibility of the sports car racing facility's owners or operators, or designated agent, to measure and record the required sound level data. Upon reasonable request, the owner or operator shall make such recorded sound level data available to the Agency. The owner and operator must keep such recorded sound level data for the duration of the racing season.

Section 903.162 Sound Emission Limits

No person shall cause or allow the use or operation of any sports car racing vehicle required to have a muffler in accordance with Section 903.160 whose sound emissions while accelerating, as measured in accordance with Section 903.161, exceed 105 dB (A) when measured 50 feet from the center of the lane of travel of such sports car racing vehicle while accelerating on the track.

SUBPART E: MOTORCYCLE RACING FACILITIES

Section 903.180 Muffler Requirements

- a) Except as provided in subparagraph (b), on and after March 15, 1979, no person shall cause or allow the use or operation of any motorcycle racing vehicle competing at a motorcycle racing facility unless such motorcycle racing vehicle is equipped with a well-maintained and properly installed muffler.
- b) The following motorcycle racing vehicles shall not require a muffler in accordance with subparagraph (a): supercharged motorcycle racing vehicles.

Section 903.181 Sound Level Measurement Requirements

The requirements for measuring noise emissions from motorcycle racing vehicles competing at motorcycle racing facilities shall be identical to those specified under Section 903.121(c) for motorcycle racing vehicles competing at drag racing facilities.

Section 903.182 Sound Emission Limits

No person shall cause or allow the use or operation of any motorcycle racing vehicle required to have a muffler in accordance with Section 903.180 whose sound emissions exceed 115 dB (A) when measured in accordance with Section 903.181 and when measured one-half meter from the rearmost exhaust outlet.

SUBPART F: EXCEPTIONS AND COMPLIANCE DATES FOR PART 903

Section 903.200 Exceptions

- a) Sections 903.120 through 903.182 shall not apply to any special-motor-racing-events, provided that not more than three special-motor-racing-events are conducted at any motor racing facility during any calendar year. The owner or operator of any motor racing facility which is conducting a special-motor-racing-event must previously notify the local public that a special-motor-racing-event will be conducted.**
- b) Sections 903.120 through 903.182 shall not apply to motor racing facilities which conduct motor racing events on fewer than five days per calendar year.**
- c) Sections 903.120 through 903.182 shall not apply to fairground motor racing facilities during motor racing events held in conjunction with a state or county fair.**
- d) Sections 903.102 through 903.182 shall not apply if there are no residential dwelling units within two miles of such motor racing facility's racing surface.**
- e) Sections 903.102 through 903.182 shall not apply to any motor racing facility whose sound emissions do not at any time exceed the background sound level by more than 7 dB(A) at any residential dwelling unit.**
- f) Sections 903.102 through 903.182 shall not apply to any existing motor racing facility whose sound emissions do not at any time exceed the allowable octave band sound pressure levels specified in 35 Ill. Adm. Code 901.102(a) when measured at any point within any receiving Class A land.**
- g) Sections 903.102 through 903.182 shall not apply to any new motor racing facility whose sound emissions do not exceed at any time during daytime hours the allowable octave band sound pressure levels specified in 35 Ill. Adm. Code 901.102(a) or at any time during the nighttime**

hours the allowable octave band sound pressure levels specified in 35 Ill. Adm. Code 901.102(b) when measured at any point within any receiving Class A land.

Section 903.201 Compliance Dates for Part 903

- a) Every owner or operator of an existing motor racing facility shall comply with the requirements of this Part by September 24, 1978.
- b) Every owner or operator of a new motor racing facility shall comply with the requirements of this Part when motor racing activities commence at such new motor racing facility.

Section 903.APPENDIX A OLD RULE NUMBERS REFERENCED

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

Old Part 4 of Chapter 8	35 Ill. Adm. Code Part 903
Rule 401	Section 903.101
Rule 402	Section 903.102
Rule 403	Section 903.120
Rule 404	Section 903.121
Rule 405	Section 903.122
Rule 406	Section 903.140
Rule 407	Section 903.141
Rule 408	Section 903.142
Rule 409	Section 903.160
Rule 410	Section 903.161
Rule 411	Section 903.162
Rule 412	Section 903.180
Rule 413	Section 903.181
Rule 414	Section 903.182
Rule 415	Section 903.200
Rule 416	Section 903.201