ILLINOIS POLLUTION CONTROL BOARD
January 22, 1998

IN THE MATTER OF:	)	
	)	
ENHANCED VEHICLE INSPECTION	)	R98-24
AND MAINTENANCE (I/M)	)	(Rulemaking - Air)
REGULATIONS: AMENDMENTS	)	
TO 35 ILL. ADM. CODE 240	)	

Proposed Rule. First Notice.

OPINION AND ORDER OF THE BOARD (by K.M. Hennessey):

On January 21, 1998, the Illinois Environmental Protection Agency (Agency) filed a proposal to amend 35 Ill. Adm. Code 240, Enhanced Vehicle Inspection and Maintenance Regulations. Today, the Board adopts the proposal for first notice.

Sections 182(b) and 182(c) of the federal Clean Air Act (CAA), 42 U.S.C. Sections 7582(b), 7582(c) (1990), require states to adopt "inspection and maintenance" (I/M) programs in areas that do not meet National Ambient Air Quality Standards (NAAQS) for ozone and/or carbon monoxide. In Illinois, two areas do not meet the NAAQS for ozone: the Metro-East St. Louis nonattainment area, which is in moderate nonattainment with the ozone NAAQS; and the Chicago nonattainment area, which is in severe nonattainment with the ozone NAAQS. Agency Statement of Reasons (Agency Statement) at 2.

The CAA requires Illinois to adopt a "basic" I/M program for moderate ozone nonattainment areas, and an "enhanced" I/M program in each urbanized area in a severe ozone nonattainment area with a population of 200,000 or more. 42 U.S.C. Sections 7511a(b), (c) (1996). These programs are to be included in revisions to Illinois' State Implementation Plan (SIP), which sets forth Illinois' overall plan for achieving the ozone NAAQS. *Id*.

Illinois has a Vehicle Emission Inspection Law (Inspection Law) currently codified at 625 ILCS 5/13B-1 - 13B-75 (1996), as amended by Pub. Act 90-475, eff. August 17, 1997. The Inspection Law requires the Agency to propose to the Board, and the Board to adopt, emissions standards for vehicles in portions of the Metro-East St. Louis and Chicago metropolitan areas. The Board adopted the bulk of the standards necessary for implementation of the enhanced I/M program as a result of the rulemakings docketed as Enhanced Vehicle Inspection and Maintenance Regulations: Amendments to 35 Ill. Adm. Code 240 (December 1, 1994), R94-19 and R94-20. In the current proposal, the Agency proposes the remainder of the mobile source emissions standards necessary for the implementation of the enhanced I/M program. The proposal also clarifies and modifies existing standards.

Specifically, the Agency states that the proposed amendments modify the evaporative system test to allow for three types of inspection of the fuel cap portion of a vehicle's

evaporative system, rather than the current test; adds "fast-pass" standards to allow vehicles undergoing I/M 240 exhaust emissions tests to be tested more quickly, saving time and money; and adds standards for the required on-board diagnostic test and on-road sensing test. In addition, the proposed rules modify requirements relating to "purge" tests, in accordance with recent amendments to the Inspection Law. The Agency asserts that the proposal constitutes an integral part of Illinois' enhanced I/M SIP package and must be adopted before an enhanced I/M SIP can be finally approved and any threat of federal sanctions under the CAA eliminated. Agency Statement at 5.

PROCEDURAL MATTERS

Along with the proposal, the Agency filed a motion to waive certain procedural requirements. First, the Agency asks the Board to waive the requirement that the Agency provide an original and nine copies of the proposal and instead allow the Agency to file one complete original, five complete copies, and four partial copies, the latter consisting of pleadings and the proposed rules absent supporting exhibits. Second, the Agency moved that the Board waive the requirement that it provide the Attorney General's Office and the Department of Natural Resources with a copy of the proposed amendments. The Agency asserts that it has discussed the matter with both offices, who agreed that the Agency need not supply their offices with a copy of the entire proposal. Finally, the Agency moved that the Board waive any requirement to file with the Board a copy of the CAA, which the Agency has relied upon but which is readily accessible to the Board. The Board grants the Agency's motion to waive these procedural requirements.

The Inspection Law provides that the Board is to adopt I/M rules by the identical-in-substance rulemaking procedure under Section 7.2 of the Act, 415 ILCS 5/7.2 (1996). See 625 ILCS 5/13B-20(a) (1996). That section provides an expedited procedure for the Board to adopt state regulations that are identical in substance to federal regulations. However, most of the federal I/M scheme is not codified in federal regulations, but exists only as federal guidance. In its earlier I/M rulemakings, the Board and the Agency agreed it appropriate to proceed under Section 28.5 of the Act, 415 ILCS 5/28.5 (1996), which applies to rules that the CAA requires the state to adopt. The Agency asserts that Section 28.5 also applies here. The Board agrees and will proceed under Section 28.5.

Under Section 28.5 of the Act, the Board is required to proceed within set timeframes toward the adoption of the regulation. Today the Board sends this proposal to first notice under the Illinois Administrative Procedure Act (5 ILCS 100/5-5 *et seq*. (1996)) without commenting on the merits of the proposal. The following schedule indicates the deadlines by which the Board must act as provided in Section 28.5 of the Act:

First Notice	on or before February 4, 1998
First Hearing	on or before March 17, 1998
Second Hearing	on or before April 16, 1998
Third Hearing	on or before April 30, 1998
Second Notice	

(if 3rd hearing is canceled)	on or before May 31, 1998
(if 3rd hearing is held)	on or before June 20, 1998
Final Adoption	21 days after receipt of JCAR certificate of no objection

The Board notes that the above dates are deadlines established by Section 28.5 of the Act (415 ILCS 5/28.5 (1996)) and do not represent actual hearing dates or filing dates. While the schedule includes a second and third hearing, these hearings may be canceled if no one requests that the Board holds these hearings.

The Board notes that the Inspection Law exempts the proposed amendments from the requirements of Section 27(b) of the Act, 415 ILCS 5/27(b) (1996). See 625 ILCS 5/13B-20(a) (1996). Accordingly, the Board will not request that an economic impact study of the proposal be performed.

ORDER

The Board directs the Clerk to cause publication of the proposed amendments in the *Illinois Register* for first notice:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER k: EMISSION STANDARDS AND LIMITATIONS FOR MOBILE SOURCES

PART 240
MOBILE SOURCES

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SUBPART H: ON-BOARD DIAGNOSTIC (OBD) TEST STANDARDS

240.191 Applicability
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240.Appendix A Rule into Section Table
240.Appendix B Section into Rule Table

240.Table A Vehicle Exhaust Emission Start-Up Standards
240.Table B Vehicle Exhaust Emission Final Standards
240 Table C Vehicle Exhaust Emission Fast-Pass Standards

AUTHORITY: Implementing Sections 9, 10 and 13 and authorized by Sections 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/9, 10, 13, 27, and 28.5] and Section 13B-20 of the Vehicle Emissions Inspection Law of 1995 [625 ILCS 5/13B-20 (1996)] ~~(see P.A. 88-533, effective January 18, 1994)~~; as amended by Section 10 of P.A. 90-475, effective August 16, 1997]~~.~~

SOURCE: Adopted as Chapter 2: Air Pollution, Part VII: Mobile Sources, filed and effective April 14, 1972; codified at 7 Ill. Reg. 13628; amended in R85-25, at 10 Ill. Reg. 11277, effective June 16, 1986; amended in R90-20 at 16 Ill. Reg. 6184, effective April 7, 1992; amended in R94-20 at 18 Ill. Reg. 18013, effective December 12, 1994; amended in R94-19 at 18 Ill. Reg. 18228, effective December 20, 1994; amended in R98-24 at _____ Ill. Reg._____, effective _____.

BOARD NOTE: This part implements the Environmental Protection Act as of July 1, 1994.

NOTE: Capitalization denotes statutory language.

SUBPART A: DEFINTIONS AND GENERAL PROVISIONS

Section 240.102 Definitions

All terms which appear in this Part have the definitions specified in this Part and 35 Ill. Adm. Code 201 and 211. Where conflicting definitions occur, the definitions of this Section apply in this Part.

> "Diesel engine" means all types of internal-combustion engines in which air is compressed to a temperature sufficiently high to ignite fuel injected directly into the cylinder area.

"Diesel locomotive" means a diesel engine vehicle designed to move cars on a railway.

"Evaporative system integrity test" means a test of a vehicle's evaporative system. The test shall either consist of a leak check of a vehicle's fuel cap with a fuel cap pressure decay tester (fuel cap pressure decay test), a fuel cap leak flow tester (fuel cap leak flow test), or a visual functional check, as applicable

"Fuel cap" means a device used to seal a vehicle's fuel inlet.

"Fuel cap leak flow test" means a test which may be performed in accordance with this Part on a vehicle's fuel cap using a fuel cap leak flow tester to determine whether the vehicle complies with the evaporative system emission standards of this Part.

"Fuel cap leak flow tester" means a device used to determine the leak flow integrity of a vehicle's fuel cap by comparing the measured leak flow of the fuel cap with an established fuel cap leak flow standard.

"Fuel cap pressure decay test" means the test performed in accordance with this Part on a vehicle's fuel cap using a fuel cap pressure decay tester to determine whether the vehicle complies with the evaporative system emission standards of this Part.

"Fuel cap pressure decay tester" means a device used to determine the pressure decay integrity of a vehicle's fuel cap by monitoring the pressure behind the fuel cap for a ten second period and comparing the measured pressure decay of the fuel cap to an established fuel cap pressure decay standard.

"Fuel cap visual function test" means the test performed in accordance with this Part on a vehicle's fuel cap using visual analysis to determine whether the vehicle complies with the evaporative system emission standards of this Part.

"Full power position" means the throttle position at which the engine fuel delivery is at maximum flow.

"Gross vehicle weight rating (GVWR)" means the value specified by the manufacturer as the maximum design loaded weight of a single vehicle.

"Heavy duty vehicle" means any motor vehicle rated at more than 8500 pounds GVWR or that has a vehicle curb weight of more than 6000 pounds or that has a basic vehicle frontal area in excess of 45 square

feet.

"High idle" means a vehicle operating condition with engine disconnected from an external load (placed in either neutral or park) and operating at speed of 2500 (plus or minus) 300 RPM.~~that portion of a steady-state idle test conducted with the engine operating at a speed of approximately 2500 RPM.~~

"Idle mode" means that portion of a vehicle emission test procedure conducted with the engine disconnected from an external load and operating at minimum throttle.

"Initial idle mode" means the first of up to two idle mode sampling periods during a steady-state idle mode test, during which exhaust emission measurements are made with the vehicle in "as-received" condition.

"Light duty truck 1" means a motor vehicle rated at 6000 pounds maximum GVWR or less and which has a vehicle frontal area of 45 square feet or less, and which is designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or is designed primarily for transportation of persons and has a capacity of more than 12 persons, or is available with special features enabling off-street or off-highway operation and use.

"Light duty truck 2" means a motor vehicle rated between 6001 and 8500 pounds maximum GVWR and which has a vehicle frontal area of 45 square feet or less, and which is designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or is designed primarily for transportation of persons and has a capacity of more than 12 persons, or is available with special features enabling off-street or off-highway operation and use.

"Light duty vehicle" means a passenger car or passenger car derivative capable of seating 12 passengers or fewer. "Loaded mode" means that portion of a vehicle emission test procedure conducted with the vehicle positioned and operating under load on a chassis dynamometer.

"Loaded vehicle weight (LVW)" means the vehicle curb weight plus 300 pounds.

"Measured values" means five second running averages of exhaust emission concentrations sampled at a minimum rate of twice per second.

"Model year" means the year of manufacture of a motor vehicle based

upon the annual production period as designated by the manufacturer and indicated on the title and registration of the vehicle. If the manufacturer does not designate a production period for the vehicle, then "model year" means the calendar year of manufacture.

"Motor vehicle" as used in this Part, shall have the same meaning as in Section 1-146 of the Illinois Vehicle Code [625 ILCS 5/1-146].

"Preconditioning mode" means a period of steady-state loaded mode or high-idle operation conducted to ensure that the engine and emissions control system components are operating at normal operating temperatures, thus minimizing false failures caused by improper or insufficient warm-up.

~~"Pressure test" means a test of a vehicle's evaporative emission control system to verify the system's integrity by identifying the presence of system leaks by injecting an inert gas into the system and confirming the system's ability to hold pressure over a specified period of time.~~

~~"Purge test" means a test of the vehicle's evaporative emission control system to determine the ability of the system to properly recycle gasoline vapors captured and adsorbed on the charcoal in the system's canister. The purge test consists of determining the volume of vapor flow between the canister and the engine as measured during the course of the transient loaded (IM240) exhaust emissions test.~~

"Second-chance idle mode" means the second of two idle mode sampling periods during a steady-state idle mode test, preceded by a preconditioning mode and utilized as a second chance to pass idle exhaust emission standards immediately following an initial idle mode failure.

"Smokemeter or opacimeter" means an optical instrument designed to measure the opacity of smoke or diesel exhaust gases using the light extinction method.

"Snap-idle cycle" means rapidly depressing the accelerator pedal from normal idle to the full power position while the vehicle is in neutral, holding the pedal in the position for no longer than ten seconds or until the engine reaches maximum RPM, and fully releasing the pedal so that the engine decelerates to normal idle.

"Steady-state idle test" means a vehicle emission test procedure consisting of an initial idle mode measurement of exhaust emissions followed, if necessary, by a loaded or high idle preconditioning mode

and a second-chance idle mode.

~~"Tier 1" means the exhaust emission standards required by the Clean Air Act as amended in 1990 that require auto makers to reduce tailpipe emissions of hydrocarbons and oxides of nitrogen by 35% and 60%, respectively, from pre-existing standards, beginning with 40% of the vehicles sold in 1994, 80% in 1995, and 100% thereafter.~~

"Transient loaded mode test" means a vehicle emissions test run on an inertial and power absorbing dynamometer using USEPA's IM240 driving cycle consisting of accelerations and decelerations simulating on-road driving conditions.

~~"Test Procedure" means the preparation, preconditioning sequence and smoke opacity measurement processes using the snap idle cycle for determining compliance with Section 240.141.~~

~~"Two-speed idle test" means a vehicle emission test procedure consisting of the measurements of exhaust emission in high idle and idle modes.~~

(Source: Amended at 18 Ill. Reg. 18228, effective December 20, 1994; amended at ____ Ill. Reg. _____, effective _____)

Section 240.104 Inspection

~~All motor vehicles subject to inspection pursuant to Section 13A-104 of the Illinois Vehicle Emissions Inspection Law [625 ILCS 5/13A-104] shall comply with the exhaust emission standards for carbon monoxide and hydrocarbons set forth at Section 240.124 of this Part. All motor vehicles subject to inspection pursuant to Section 13B-15 of the Illinois Vehicle Emissions Inspection Law of 1995 (Vehicle Emissions Inspection Law of 1995) [625 ILCS 5/13B-15] (see P.A. 88-533, effective January 18, 1994) shall comply with applicable vehicle emission standards contained in Sections 240.152, 240.162, 240.163, 240.172, and 240.173 of this Part.~~

a) All motor vehicles subject to inspection pursuant to Section 13A-104 of the Illinois Vehicle Emissions Inspection Law [625 ILCS 5/13A-104] shall comply with the exhaust emission standards for carbon monoxide and hydrocarbons set forth at Section 240.124 of this Part.

b) All motor vehicles subject to inspection pursuant to Section 13B-15 of the Illinois Vehicle Emissions Inspection Law of 1995 (Vehicle Emissions Inspection Law of 1995) [625 ILCS 5/13B-15] (see P.A. 88-533, effective January 18, 1994) shall comply with applicable vehicle emission standards

contained in Sections 240.152, 240.162, 240.163, 240.172, 240.182 and 240.192 of this Part.

(Source: Amended at 18 Ill. Reg. 18228, effective December 20, 1994; amended at _____ Ill. Reg. _____, effective _____)

Section 240.105 Penalties

a) Any violations of Sections 240.103, 240.121, 240.122, and 240.123 of this Part shall be subject to the penalties as set forth in Section 42 of the Act [415 ILCS 5/42].

b) Any violations of Sections 240.204(a)~~240.104~~ and 240.124 of this Part shall be subject to the penalties as set forth in Sections 13A-112 and 13A-113 of the Vehicle Emissions Inspection Law [625 ILCS 5/13A-112 and 13A-113].

c) Any violations of Sections 240.204(b), 240.152, 240.162, 240.163, 240.172, and 240.182 ~~240.173~~ of this Part shall be subject to the penalties as set forth in Sections 13B-55 and 13B-60 of the Vehicle Emissions Inspection Law of 1995.

(Source: Amended at 18 Ill. Reg. 18228, effective December 20, 1994; amended at _____ Ill. Reg. _____, effective _____)

Section 240.106 Determination of Violation

a) Any violations of Sections 240.103, 240.121, 240.122, and 240.123 of this Part shall be determined by visual observation; or by a test procedure employing an opacity measurement system as qualified by 35 Ill. Adm. Code 201, Subpart J.

b) Any violations of Sections 240.124, 240.152, 240.162, 240.163, 240.172, or 240.182 ~~240.173~~ of this Part shall be determined in accordance with test procedures adopted by the Agency in 35 Ill. Adm. Code 276.

(Source: Amended at 18 Ill. Reg. 18228, effective December 20, 1994; amended at _____ Ill. Reg. _____, effective _____)

Section 240.107 Incorporations by Reference

The following materials are incorporated by reference and include no later editions or amendments:

a) Society of Automotive Engineers (SAE), 400 Commonwealth Drive, Warrendale, PA 15096: Report J255a Diesel Engine Smoke Measurement (August 1978).

b) International Standards Organization (ISO), Case Postale 56, 1211 Geneve 20, Switzerland: ISO 393 (Working Draft, January 1991). Also available from American National Standards Institute (ANSI), 11 West 42nd Street, New York, NY 10036.

c) United States Environmental Protection Agency (USEPA), "High-Tech I/M Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications: IM240 and Functional Evaporative System Tests, Revised Technical Guidance," Report EPA-AA-RSPD-IM-96-1, (June 1996). ~~Report EPA-AA-EPSD-IM-1, High Tech I/M Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications (April 1994).~~

(Source: Amended at 18 Ill. Reg. 18228, effective December 20, 1994 amended at _____ Ill. Reg. _____, effective _____)

SUBPART E: TRANSIENT LOADED MODE TEST EMISSION STANDARDS

Section 240.162 Vehicle Exhaust Emission Start-Up Standards

Vehicle exhaust emission start-up standards contained in Section 240.Table A of this Part shall apply for all vehicles subject to inspection until two years after the beginning of IM240 testing.~~December 31, 1997. Tier 1 standards shall apply to all model year 1996 and newer vehicles and model year 1994 and newer vehicles certified to Tier 1 standards.~~ All standards are expressed in grams per mile (gpm).

(Source: Added at 18 Ill. Reg. 18228, effective December 20, 1994; amended _____ Ill. Reg. _____, effective _____)

Section 240.163 Vehicle Exhaust Emission Final Standards

Vehicle exhaust emission final standards contained in Section 240.Table B of this Part shall apply for all vehicles subject to inspection beginning at the conclusion of testing using the start-up vehicle exhaust emissions standards required in Section 240.162. ~~on January 1, 1998. Tier 1 standards shall apply to all model year 1996 and newer vehicles and model year 1994 and newer vehicles certified to Tier 1 standards.~~ All standards are expressed in grams per mile (gpm).

(Source: Added at 18 Ill. Reg. 18228, effective December 20, 1994; amended at_____ Ill. Reg. _____, effective _____)

~~Section 240.164 Compliance Determination~~

~~Compliance shall be determined based upon the measurement of exhaust emissions while operating the vehicle on a dynamometer and following the driving cycle as specified for the~~

~~transient IM240 test procedures adopted by the Agency. If the corrected, composite emission rates exceed standards for any pollutant, additional analysis of test results shall review the second phase ("Phase 2") of the driving cycle separately. Phase 2 shall include second 94 through second 239 of the driving cycle. Second-by-second emission rates in grams and composite emission rates in grams per mile for Phase 2 and for the entire composite test shall be recorded for each pollutant. For any given pollutant, if the composite emission level is at or below the composite standard or if the Phase 2 grams per mile emission level is at or below the applicable Phase 2 standard, then the vehicle shall pass the test for that pollutant. Composite and Phase 2 emission rates shall be calculated in accordance with procedures specified in "High-Tech I/M Procedures, Emissions Standards, Quality Control Requirements, and Equipment Specifications Final Technical Guidance" incorporated by reference at Section 240.107 of this Part.~~

~~(Source: Added at 18 Ill. Reg. 18228, effective December 20, 1994)~~

Section 240.164 Vehicle Exhaust Emission Fast-Pass Standards

Vehicle exhaust emissions fast-pass standards contained in Section 240.Table C of this Part will apply for all vehicles subject to inspection under Section 240.161 of this Part utilizing the IM240 transient loaded mode exhaust emission test procedures specified in 35 Ill. Adm. Code 276. All standards are expressed as the cumulative grams for each second of the composite and Phase 2 tests.

(Source: Added at _____ Ill. Reg. _____, effective _____)

Section 240.165 Compliance Determination

a) Compliance shall be determined based upon the measurement of exhaust emissions while operating the vehicle on a dynamometer and following the driving cycle as specified for the transient IM240 test procedures adopted by the Agency. If the corrected, composite emission rates exceed standards for any pollutant, additional analysis of test results shall review the second phase ("Phase 2") of the driving cycle separately. Phase 2 shall include second 94 through second 239 of the driving cycle. Second-by-second emission rates in grams and composite emission rates in grams per mile for Phase 2 and for the entire composite test shall be recorded for each pollutant. For any given pollutant, if the composite emission level is at or below the composite standard or if the Phase 2 grams per mile emission level is at or below the applicable Phase 2 standard, then the vehicle shall pass the test for that pollutant. Composite and Phase 2 emission rates shall be calculated in accordance with procedures specified in "High-Tech I/M Procedures, Emissions Standards, Quality Control Requirements, and Equipment Specifications Final Technical Guidance" incorporated by reference at Section 240.107 of this Part.

b) Compliance Determination-Vehicle Exhaust Emission Fast-Pass Standards

Compliance will be determined based upon the measurement of exhaust emissions while operating the vehicle on a dynamometer and following the driving cycle as specified for the transient IM240 test procedures adopted by the Agency. Vehicles will be fast-passed using the following algorithm:

1) Beginning at second 30 of the driving cycle, cumulative second-by-second emission levels for each second, calculated from the start of the cycle in grams, will be compared to the cumulative fast-pass emission standards for the second under consideration. Beginning at second 109, fast-pass decisions are based upon analysis of cumulative emissions in phase 2, the portion of the test beginning at second 94, as well as emission levels accumulated from the beginning of the composite test.

2) A vehicle will pass the transient IM240 test for a given pollutant if either of the following conditions occurs:

A) cumulative emissions of the pollutant are below the full cycle fast-pass standard for the second under consideration; or

B) at second 109 and later, cumulative Phase 2 emissions are below the Phase 2 fast-pass standards for the second under consideration.

3) Testing may be terminated when fast-pass criteria are met for all subject pollutants in the same second.

4) If a fast-pass determination cannot be made for all subject pollutants before the driving cycle ends, the pass/fail determination for each component will be based on composite or Phase 2 emissions over the full driving cycle according to the procedures in subsection (a) of this Section. In cases where fast-pass standards are not used, composite emission rates in grams per mile for Phase 2 and for the entire composite test will be recorded for each pollutant.

5) Composite and Phase 2 emission rates will be calculated in accordance with procedures specified in "High-Tech I/M Procedures, Emissions Standards, Quality Control Requirements, and Equipment Specifications Final Technical Guidance" incorporated by reference at Section 240.107 of this Part.

(Source: Added at _____ Ill. Reg. _____, effective _____)

SUBPART F: EVAPORATIVE TEST STANDARDS

Section 240.171 Applicability

~~a)~~ The standards of Section 240.172 of this Subpart shall apply to all model year 1968 and newer vehicles required at the time of manufacture to be equipped with evaporative emission control systems.

~~b) The standards of Section 240.173 of this Subpart shall apply to model year 1981 and newer light duty vehicles, light duty trucks 1, and light duty trucks 2 that are inspected utilizing the transient loaded mode exhaust emission test procedures adopted by the Agency.~~

(Source: Added at 18 Ill. Reg. 18228, effective December 20, 1994; amended at _____ Ill. Reg. _____, effective _____-)

SUBPART F: EVAPORATIVE TEST STANDARDS

Section 240.172 Evaporative System Pressure Test Standards

Vehicles subject to evaporative system integrity testing shall fail the evaporative system integrity test if one of the following occurs:

a) Fuel Cap Pressure Decay Standards - While tested using the fuel cap pressure decay tester, the pressure decays by 6 + 0.3 inches of water or more during a 10 second period after being pressurized to 28 + 1 inches of water column; ~~The vehicles shall be inspected utilizing an evaporative system pressure test adopted by the Agency.~~

b) Fuel Cap Leak Flow Test Standards - While tested using the fuel cap leak flow tester, the fuel cap leak flow rate exceeds 60 + 3 cc/min at a pressure of 30 + 1 inches of water column. Determination will be made by comparing the fuel cap's measured leak flow rate with the flow rate obtained from a calibrated master orifice with a National Institute of Standards and Technology traceable flow rate which will result in a pass/fail flow rate threshold of 60 + 3 cc/min of air at 30 + 1 inches of water column; or~~The vehicle shall fail the evaporative system pressure test if one of the following occurs:~~

~~1) The system cannot maintain a system pressure above eight inches of water for up to two minutes after being pressurized to 14 plus or minus 0.5 inches of water;~~

~~2) No pressure drop is detected when the gas cap is loosened;~~

~~3) The fuel vapor storage canister is missing or obviously damaged;~~

~~4) System vapor lines or hoses are missing or obviously disconnected; or~~

~~5) The gas cap is missing.~~

c) Visual Functional Test Standards - While tested using the visual functional test, an inspection of the fuel cap reveals one or more of the following:

1) a missing fuel cap;

2) a missing or damaged o-ring, gasket, or seal;

3) missing or damaged threads, flanges, prongs, or other parts used to secure the fuel cap to the fuel tank filler neck; and/or

4) cracks, holes, or other visible forms of tampering or damage.

~~BOARD NOTE: Derived from 40 CFR 51.357(b)(3)(i) (1993).~~

(Source: Added at 18 Ill. Reg. 18013, effective December 12, 1994; amended at _____ Ill. Reg. _____, effective _____-)

~~Section 240.173 Evaporative System Purge Test Standards~~

~~a) The vehicle shall be inspected utilizing the evaporative system purge test adopted by the Agency.~~

~~b) The vehicle shall fail the evaporative system purge test if the canister purge system flow as measured during the course of the transient exhaust emission test is less than one liter.~~

~~BOARD NOTE: Derived from 40 CFR 51.357(b)(3)(ii) (1993).~~

~~(Source: Added at 18 Ill. Reg. 18013, effective December 12, 1994)~~

SUBPART G: ON-ROAD REMOTE SENSING TEST EMISSION STANDARDS

Section 240.181 Applicability

The standards of this Subpart apply to all vehicles which are inspected utilizing the on-road remote sensing exhaust emission test procedures adopted by the Agency in 35 Ill. Adm. Code 276.

(Source: Added at Ill. Reg. , effective)

Section 240.182 On-Road Remote Sensing Emission Standards

Exhaust emissions from all subject vehicles and trucks shall not exceed the following limitations:

Model Year	Hydrocarbons (ppm)	Carbon Monoxide (%)
1992 +	400	2.0
1988-1991	450	3.0
1981-1987	650	5.0
1975-1980	1300	7.0
1968-1974	1700	8.0

(Source: Added at Ill. Reg. , effective)

Section 240.183 Compliance Determination

Compliance shall be determined based upon the measurement of exhaust emissions using the on-road remote sensing test procedures adopted by the Agency. If, during the course of on-road inspections, a vehicle is found to exceed the on-road remote sensing emission standards specified in Section 240.182 for the model year and type of vehicle, the Agency shall send a notice to the vehicle owner of the violation, which notice will include the time and location of the reading. The notice of a second on-road remote sensing exceedance shall, in addition to the information contained in the first notice, indicate that the vehicle has been reassigned and is subject to an out-of-cycle follow-up inspection at an official inspection station. In no case shall the Agency send a notice of an on-road exceedance to the owner of a vehicle that was found to exceed the on-road remote sensing emission standards if the vehicle is registered outside the affected counties.

(Source: Added at Ill. Reg. , effective)

SUBPART H: ON-BOARD DIAGNOSTIC (OBD) TEST STANDARDS

Section 240.191 Applicability

The standards of this Subpart apply to all 1996 and newer model year light duty vehicles, light duty trucks 1, and light duty trucks 2 that are required to meet the standards contained in 40 CFR 86.094-17 and which are inspected utilizing the OBD test procedures adopted by the Agency in 35 Ill. Adm. Code 276. This shall be an advisory test only; vehicles which receive

a result of "fail" using the standards of Section 240.192 shall not thereby fail their emissions test.

(Source: Added at Ill. Reg. , effective)

Section 240.192 OBD Test Standards

Vehicles subject to OBD testing shall fail the on-board diagnostic test if one of the following occurs:

a) the vehicle connector is missing, has been tampered with, or is otherwise inoperable;

b) the malfunction indicator light is commanded to be illuminated and it is not visually illuminated according to visual inspection; or,

c) the malfunction indicator light is commanded to be illuminated and any of the following OBD codes, as defined by SAE J2012 are present (where X refers to any digit):

1) Any PX1XX Fuel and Air Metering codes

2) Any PX2XX Fuel and Air Metering codes

3) Any PX3XX Ignition System or Misfire codes

4) Any PX4XX Auxiliary Emission Controls codes

5) P0500 Vehicle Speed Sensor Malfunction

6) P0501 Vehicle Speed Sensor Range/Malfunction

7) P0502 Vehicle Speed Sensor Circuit Low Input

8) P0503 Vehicle Speed Sensor Intermittent/Erratic/ High

9) P0505 Idle Control System Malfunction

10) P0506 Idle Control System RPM Lower Than Expected

11) P0507 Idle Control System RPM Higher Than Expected

12) P0510 Closed Throttle Position Switch Malfunction

13) P0550 Power Steering Pressure Sensor Circuit Malfunction

14) P0551 Power Steering Pressure Sensor Circuit Malfunction

15) P0552 Power Steering Pressure Sensor Circuit Low Input

16) P0553 Power Steering Pressure Sensor Circuit Intermittent

17) P0554 Power Steering Pressure Sensor Circuit Intermittent

18) P0560 System Voltage Malfunction

19) P0561 System Voltage Unstable

20) P0562 System Voltage Low

21) P0563 System Voltage High

22) Any PX6XX Computer and Output Circuits codes

23) P0703 Brake Switch Input

24) P0705 Transmission Range Sensor Circuit Malfunction (PRNDL Input)

25) P0706 Transmission Range Sensor Circuit. Range/Performance

26) P0707 Transmission Range Sensor Circuit Low Input

27) P0708 Transmission Range Sensor Circuit High Input

28) P0709 Transmission Range Sensor Circuit Intermittent

29) P0719 Torque Converter/Brake Switch "B" Circuit Low

30) P0720 Output Speed Sensor Circuit Malfunction

31) P0721 Output Speed Sensor Circuit Range/Performance

32) P0722 Output Speed Sensor Circuit No Signal

33) P0723 Output Speed Sensor Circuit Intermittent

34) P0724 Torque Converter/Brake Switch "B" Circuit High

35) P0725 Engine Speed Input Circuit Malfunction

36) P0726 Engine Speed Input Circuit Range/Performance

37) P0727 Engine Speed Input Circuit No Signal

38) P0728 Engine Speed Input Circuit Intermittent

39) P0740 Torque Converter Clutch System Malfunction

40) P0741 Torque Converter System Performance or Stuck Off

41) P0742 Torque Converter System Stuck On

42) P0743 Torque Converter System Electrical

43) P0744 Torque Converter System Intermittent

(Source: Added at Ill. Reg. , effective)

Section 240.193 Compliance Determination

Compliance shall be determined based upon the inspection of the OBD vehicle connector, MIL, and fault codes using the OBD test procedures adopted by the Agency and specified in 35 Ill. Adm. Code 276.208.

(Source: Added at Ill. Reg. , effective)

Section 240.Table A Vehicle Exhaust Emission Start-Up Standards

Light Duty Vehicles:

Model Years	Hydrocarbons		Carbon Monoxide		Oxides of Nitrogen	
	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)
~~Tier 1 (1994+)~~ 1996+	0.80	0.50	15.0	12.0	2.0	Reserved
1991-1995	1.20	0.75	20.0	16.0	2.5	Reserved
1983-1990	2.00	1.25	30.0	24.0	3.0	Reserved
1981-1982	2.00	1.25	60.0	48.0	3.0	Reserved

Light Duty Trucks 1:

Model Years	Hydrocarbons		Carbon Monoxide		Oxides of Nitrogen	

	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)
~~Tier 1 (1994+)~~ 1996+						
(< 3750 LVW)	0.80	0.50	15.0	12.0	2.0	Reserved
(> 3750 LVW)	1.00	0.63	20.0	16.0	2.5	Reserved
1991-1995	2.40	1.50	60.0	48.0	3.0	Reserved
1988-1990	3.20	2.00	80.0	64.0	3.5	Reserved
1984-1987	3.20	2.00	80.0	64.0	7.0	Reserved
1981-1983	7.50	5.00	100.0	80.0	7.0	Reserved

Light Duty Trucks 2:

Model Years	Hydrocarbons		Carbon Monoxide		Oxides of Nitrogen	
	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)
~~Tier 1 (1994+)~~ 1996+						
(< 5750 LVW)	1.00	0.63	20.0	16.0	2.5	Reserved
(> 5750 LVW)	2.40	1.50	60.0	48.0	4.0	Reserved
1991-1995	2.40	1.50	60.0	48.0	4.5	Reserved
1988-1990	3.20	2.00	80.0	64.0	5.0	Reserved
1984-1987	3.20	2.00	80.0	64.0	7.0	Reserved
1981-1983	7.50	5.00	100.0	80.0	7.0	Reserved

(Source: Added at 18 Ill. Reg. 18228, effective December 20, 1994; amended at _____ Ill. Reg. _____, effective _____)

Section 240.TABLE B Vehicle Exhaust Emission Final Standards

Light Duty Vehicles:

Model Years	Hydrocarbons		Carbon Monoxide		Oxides of Nitrogen	
	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)

~~Tier 1 (1994+)~~ 1996+	0.60	0.40	10.0	8.0	1.5	Reserved
1983-1995	0.80	0.50	15.0	12.0	2.0	Reserved
1981-1982	0.80	0.50	30.0	24.0	2.0	Reserved

Light Duty Trucks 1:

Model Years	Hydrocarbons		Carbon Monoxide		Oxides of Nitrogen	
	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)
~~Tier 1 (1994+)~~ 1996+						
(< 3750 LVW)	0.60	0.40	10.0	8.0	1.5	Reserved
(> 3750 LVW)	0.80	0.50	13.0	10.0	1.8	Reserved
1988-1995	1.60	1.00	40.0	32.0	2.5	Reserved
1984-1987	1.60	1.00	40.0	32.0	4.5	Reserved
1981-1983	3.40	2.00	70.0	56.0	4.5	Reserved

Light Duty Trucks 2:

Model Years	Hydrocarbons		Carbon Monoxide		Oxides of Nitrogen	
	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)	Composite (gpm)	Phase 2 (gpm)
~~Tier 1 (1994+)~~ 1996+						
(< 5750 LVW)	0.80	0.50	13.0	10.0	1.8	Reserved
(> 5750 LVW)	0.80	0.50	15.0	12.0	2.0	Reserved
1988-1995	1.60	1.00	40.0	32.0	3.5	Reserved
1984-1987	1.60	1.00	40.0	32.0	4.5	Reserved
1981-1983	3.40	2.00	70.0	56.0	4.5	Reserved

(Source: Added at 18 Ill. Reg. 18228, effective December 20, 1994; amended at _____ Ill. Reg. _____, effective _____)

Section 240.Table C: Vehicle Exhaust Emission Fast-Pass Standards

a) Vehicles having composite hydrocarbon emission limitations of less than 1.25 grams per mile, and composite carbon monoxide emission limitations of less than 20.0 grams per mile in Section 240.Table A or Section 240.Table B:

	Hydrocarbons		Carbon Monoxide	
Second	Composite	Phase 2	Composite	Phase 2
30	0.124	N/A	0.693	N/A
31	0.126	N/A	0.773	N/A
32	0.129	N/A	0.837	N/A
33	0.135	N/A	0.851	N/A
34	0.140	N/A	0.853	N/A
35	0.146	N/A	0.857	N/A
36	0.150	N/A	0.900	N/A
37	0.153	N/A	0.960	N/A
38	0.156	N/A	1.034	N/A
39	0.160	N/A	1.070	N/A
40	0.165	N/A	1.076	N/A
41	0.169	N/A	1.083	N/A
42	0.172	N/A	1.102	N/A
43	0.173	N/A	1.111	N/A
44	0.177	N/A	1.114	N/A
45	0.197	N/A	1.157	N/A
46	0.200	N/A	1.344	N/A
47	0.208	N/A	1.482	N/A
48	0.221	N/A	1.530	N/A
49	0.232	N/A	1.542	N/A
50	0.235	N/A	1.553	N/A
51	0.238	N/A	1.571	N/A
52	0.240	N/A	1.595	N/A
53	0.242	N/A	1.633	N/A
54	0.246	N/A	1.685	N/A
55	0.249	N/A	1.689	N/A
56	0.252	N/A	1.693	N/A
57	0.261	N/A	1.700	N/A
58	0.271	N/A	1.723	N/A
59	0.276	N/A	1.852	N/A
60	0.278	N/A	1.872	N/A
61	0.280	N/A	1.872	N/A
62	0.282	N/A	1.872	N/A
63	0.283	N/A	1.900	N/A
64	0.284	N/A	1.917	N/A
65	0.285	N/A	1.944	N/A
66	0.286	N/A	2.000	N/A

67	0.288	N/A	2.060	N/A
68	0.291	N/A	2.064	N/A
69	0.294	N/A	2.076	N/A
70	0.296	N/A	2.104	N/A
71	0.298	N/A	2.117	N/A
72	0.300	N/A	2.125	N/A
73	0.302	N/A	2.130	N/A
74	0.304	N/A	2.138	N/A
75	0.307	N/A	2.152	N/A
76	0.308	N/A	2.170	N/A
77	0.308	N/A	2.188	N/A
78	0.308	N/A	2.200	N/A
79	0.314	N/A	2.212	N/A
80	0.320	N/A	2.212	N/A
81	0.324	N/A	2.221	N/A
82	0.327	N/A	2.222	N/A
83	0.329	N/A	2.227	N/A
84	0.333	N/A	2.236	N/A
85	0.336	N/A	2.243	N/A
86	0.339	N/A	2.262	N/A
87	0.343	N/A	2.271	N/A
88	0.347	N/A	2.284	N/A
89	0.350	N/A	2.299	N/A
90	0.356	N/A	2.308	N/A
91	0.358	N/A	2.326	N/A
92	0.360	N/A	2.330	N/A
93	0.363	N/A	2.331	N/A
94	0.367	N/A	2.344	N/A
95	0.370	N/A	2.347	N/A
96	0.372	N/A	2.355	N/A
97	0.376	N/A	2.395	N/A
98	0.388	N/A	2.451	N/A
99	0.396	N/A	2.508	N/A
100	0.405	N/A	2.590	N/A
101	0.410	N/A	2.660	N/A
102	0.411	N/A	2.749	N/A
103	0.412	N/A	2.913	N/A
104	0.413	N/A	3.162	N/A
105	0.421	N/A	3.170	N/A
106	0.428	N/A	3.197	N/A
107	0.430	N/A	3.288	N/A
108	0.455	N/A	3.419	N/A
109	0.459	0.015	3.587	0.168
110	0.462	0.017	3.595	0.173
111	0.464	0.021	3.640	0.237

112	0.466	0.024	3.740	0.266
113	0.468	0.024	3.868	0.280
114	0.471	0.025	3.877	0.291
115	0.488	0.026	3.934	0.314
116	0.513	0.029	4.015	0.331
117	0.538	0.032	4.061	0.345
118	0.561	0.035	4.063	0.350
119	0.577	0.035	4.079	0.356
120	0.580	0.036	4.140	0.367
121	0.586	0.038	4.185	0.388
122	0.594	0.040	4.199	0.407
123	0.603	0.041	4.205	0.463
124	0.610	0.042	4.212	0.480
125	0.615	0.042	4.232	0.506
126	0.624	0.042	4.298	0.518
127	0.628	0.045	4.344	0.522
128	0.632	0.046	4.361	0.525
129	0.637	0.046	4.366	0.528
130	0.641	0.049	4.369	0.530
131	0.643	0.050	4.372	0.553
132	0.644	0.052	4.435	0.534
133	0.645	0.054	4.523	0.550
134	0.647	0.054	4.524	0.554
135	0.651	0.054	4.525	0.590
136	0.658	0.055	4.531	0.616
137	0.663	0.055	4.534	0.639
138	0.666	0.056	4.542	0.653
139	0.668	0.059	4.553	0.662
140	0.670	0.061	4.554	0.683
141	0.672	0.061	4.554	0.696
142	0.675	0.061	4.554	0.708
143	0.678	0.063	4.554	0.721
144	0.681	0.064	4.554	0.739
145	0.684	0.065	4.554	0.742
146	0.686	0.066	4.554	0.743
147	0.688	0.067	4.554	0.745
148	0.690	0.068	4.554	0.748
149	0.692	0.069	4.554	0.751
150	0.694	0.070	4.554	0.762
151	0.696	0.071	4.556	0.789
152	0.698	0.072	4.556	0.790
153	0.700	0.073	4.565	0.794
154	0.702	0.073	4.612	0.799
155	0.704	0.074	4.834	0.805
156	0.706	0.077	5.702	0.842

157	0.708	0.079	5.841	0.990
158	0.710	0.082	6.170	1.038
159	0.712	0.082	6.670	1.357
160	0.716	0.086	7.425	1.455
161	0.750	0.095	8.379	1.546
162	0.784	0.107	9.648	1.824
163	0.805	0.115	10.918	2.746
164	0.840	0.122	12.157	3.073
165	0.853	0.127	12.731	3.633
166	0.874	0.159	12.831	4.505
167	0.903	0.186	12.892	4.952
168	0.910	0.189	12.932	5.254
169	0.914	0.200	13.702	5.730
170	0.916	0.220	14.139	6.051
171	0.919	0.236	14.964	6.333
172	0.931	0.247	15.704	6.490
173	0.948	0.257	16.253	6.796
174	0.983	0.267	16.907	7.205
175	1.018	0.283	17.655	8.151
176	1.027	0.295	18.020	8.230
177	1.035	0.312	18.349	8.584
178	1.051	0.318	18.671	8.800
179	1.074	0.323	18.972	8.847
180	1.084	0.337	19.228	8.913
181	1.099	0.345	20.123	9.122
182	1.121	0.350	20.405	9.532
183	1.132	0.359	20.754	10.256
184	1.152	0.387	21.684	10.862
185	1.161	0.398	21.955	10.996
186	1.168	0.400	22.650	11.206
187	1.175	0.402	22.989	11.514
188	1.181	0.405	23.535	11.894
189	1.188	0.418	23.876	12.019
190	1.203	0.429	24.018	12.170
191	1.219	0.442	24.464	12.517
192	1.233	0.457	24.685	12.598
193	1.251	0.473	24.931	12.625
194	1.255	0.487	25.188	12.653
195	1.258	0.501	25.468	12.777
196	1.265	0.510	25.627	12.906
197	1.280	0.512	25.746	12.989
198	1.293	0.514	25.850	13.060
199	1.301	0.516	25.974	13.165
200	1.313	0.518	26.141	13.242
201	1.324	0.527	26.225	13.412

202	1.332	0.540	26.338	13.662
203	1.341	0.547	26.547	13.773
204	1.357	0.553	26.818	13.942
205	1.375	0.559	27.052	14.090
206	1.392	0.563	27.393	14.224
207	1.408	0.567	27.501	14.426
208	1.422	0.571	27.632	14.498
209	1.433	0.575	27.803	14.776
210	1.443	0.579	27.953	14.907
211	1.453	0.595	28.205	14.916
212	1.463	0.605	28.543	15.014
213	1.468	0.614	28.997	15.221
214	1.470	0.622	29.000	15.472
215	1.474	0.627	29.005	15.555
216	1.478	0.638	29.081	15.652
217	1.481	0.643	29.281	15.969
218	1.484	0.643	29.483	16.028
219	1.487	0.645	29.734	16.375
220	1.490	0.651	29.803	16.487
221	1.493	0.655	29.821	16.524
222	1.504	0.663	29.847	16.578
223	1.522	0.671	29.862	16.684
224	1.547	0.675	29.873	16.755
225	1.549	0.684	30.008	16.770
226	1.562	0.694	30.126	16.805
227	1.574	0.701	30.127	16.865
228	1.579	0.702	30.127	16.960
229	1.584	0.708	30.208	16.960
230	1.589	0.708	30.314	16.962
231	1.590	0.709	30.323	16.988
232	1.596	0.710	30.325	17.072
233	1.598	0.710	30.368	17.094
234	1.604	0.711	30.411	17.184
235	1.610	0.712	30.416	17.189
236	1.612	0.712	30.428	17.188
237	1.613	0.712	30.430	17.189
238	1.614	0.713	30.452	17.241
239	1.615	0.716	30.488	17.370

b) Vehicles having composite hydrocarbon emission limitations of at least 1.25 grams per mile but less than 2.00 grams per mile, and composite carbon monoxide emission limitations of at least 20.0 grams per mile but less than 30.0 grams per mile in Section 240.Table A or Section 240.Table B:

	Hydrocarbons	Carbon Monoxide

Second	Composite	Phase 2	Composite	Phase 2
30	0.247	N/A	1.502	N/A
31	0.253	N/A	1.546	N/A
32	0.258	N/A	1.568	N/A
33	0.263	N/A	1.582	N/A
34	0.268	N/A	1.593	N/A
35	0.277	N/A	1.602	N/A
36	0.283	N/A	1.621	N/A
37	0.293	N/A	1.631	N/A
38	0.297	N/A	1.702	N/A
39	0.298	N/A	1.784	N/A
40	0.313	N/A	1.879	N/A
41	0.320	N/A	2.162	N/A
42	0.327	N/A	2.307	N/A
43	0.342	N/A	2.343	N/A
44	0.360	N/A	2.376	N/A
45	0.376	N/A	2.406	N/A
46	0.389	N/A	2.433	N/A
47	0.408	N/A	2.458	N/A
48	0.423	N/A	2.483	N/A
49	0.434	N/A	2.774	N/A
50	0.444	N/A	2.844	N/A
51	0.454	N/A	2.900	N/A
52	0.465	N/A	2.936	N/A
53	0.472	N/A	3.133	N/A
54	0.478	N/A	3.304	N/A
55	0.485	N/A	3.407	N/A
56	0.493	N/A	3.456	N/A
57	0.500	N/A	3.480	N/A
58	0.505	N/A	3.518	N/A
59	0.514	N/A	3.560	N/A
60	0.537	N/A	3.593	N/A
61	0.540	N/A	3.628	N/A
62	0.543	N/A	3.641	N/A
63	0.546	N/A	3.655	N/A
64	0.551	N/A	3.680	N/A
65	0.559	N/A	3.700	N/A
66	0.567	N/A	3.728	N/A
67	0.575	N/A	3.857	N/A
68	0.588	N/A	3.894	N/A
69	0.595	N/A	3.943	N/A
70	0.601	N/A	3.983	N/A
71	0.606	N/A	4.009	N/A
72	0.610	N/A	4.023	N/A
73	0.617	N/A	4.023	N/A

74	0.631	N/A	4.053	N/A
75	0.643	N/A	4.063	N/A
76	0.651	N/A	4.077	N/A
77	0.659	N/A	4.225	N/A
78	0.667	N/A	4.243	N/A
79	0.676	N/A	4.260	N/A
80	0.681	N/A	4.282	N/A
81	0.685	N/A	4.322	N/A
82	0.689	N/A	4.398	N/A
83	0.694	N/A	4.482	N/A
84	0.700	N/A	4.515	N/A
85	0.705	N/A	4.518	N/A
86	0.709	N/A	4.520	N/A
87	0.713	N/A	4.522	N/A
88	0.717	N/A	4.522	N/A
89	0.721	N/A	4.523	N/A
90	0.724	N/A	4.526	N/A
91	0.727	N/A	4.527	N/A
92	0.729	N/A	4.527	N/A
93	0.731	N/A	4.528	N/A
94	0.734	N/A	4.528	N/A
95	0.740	N/A	4.528	N/A
96	0.748	N/A	4.529	N/A
97	0.759	N/A	4.575	N/A
98	0.771	N/A	4.703	N/A
99	0.783	N/A	4.805	N/A
100	0.793	N/A	4.886	N/A
101	0.810	N/A	4.957	N/A
102	0.823	N/A	5.104	N/A
103	0.836	N/A	5.340	N/A
104	0.853	N/A	5.496	N/A
105	0.871	N/A	5.625	N/A
106	0.887	N/A	5.815	N/A
107	0.899	N/A	6.473	N/A
108	0.931	N/A	7.037	N/A
109	0.947	0.040	7.419	0.246
110	0.957	0.047	7.643	0.257
111	0.965	0.052	7.759	0.286
112	0.971	0.056	7.824	0.379
113	0.977	0.061	7.889	0.425
114	0.983	0.064	7.960	0.457
115	1.003	0.072	8.024	0.477
116	1.030	0.081	8.076	0.494
117	1.041	0.082	8.111	0.504
118	1.050	0.083	8.130	0.512

119	1.052	0.092	8.148	0.519
120	1.055	0.094	8.211	0.529
121	1.061	0.097	8.478	0.529
122	1.071	0.100	8.548	0.530
123	1.081	0.103	8.561	0.531
124	1.091	0.106	8.568	0.532
125	1.102	0.108	8.572	0.533
126	1.110	0.110	8.584	0.548
127	1.116	0.112	8.592	0.610
128	1.121	0.114	8.596	0.614
129	1.125	0.116	8.597	0.622
130	1.128	0.118	8.601	0.631
131	1.130	0.120	8.605	0.640
132	1.132	0.122	8.608	0.646
133	1.134	0.123	8.626	0.650
134	1.135	0.124	8.650	0.652
135	1.143	0.127	8.660	0.738
136	1.147	0.130	8.767	0.754
137	1.156	0.134	9.029	0.780
138	1.163	0.139	9.238	0.795
139	1.186	0.146	9.389	0.804
140	1.253	0.149	9.493	0.810
141	1.262	0.151	9.583	0.815
142	1.271	0.153	9.626	0.818
143	1.277	0.155	9.669	0.821
144	1.283	0.157	9.716	0.825
145	1.291	0.162	9.763	0.840
146	1.294	0.164	9.809	0.847
147	1.296	0.166	9.852	0.855
148	1.298	0.168	9.885	0.865
149	1.303	0.169	9.932	0.874
150	1.316	0.170	9.986	0.891
151	1.330	0.171	10.039	0.914
152	1.342	0.172	10.072	0.929
153	1.348	0.173	10.090	0.937
154	1.353	0.175	10.105	0.942
155	1.362	0.178	10.146	0.949
156	1.365	0.180	10.245	1.375
157	1.366	0.189	10.397	1.576
158	1.373	0.198	10.923	1.943
159	1.397	0.203	11.970	2.820
160	1.422	0.207	13.421	3.281
161	1.440	0.214	15.289	3.483
162	1.452	0.221	15.912	3.620
163	1.465	0.229	16.530	4.168

164	1.509	0.247	17.622	4.338
165	1.533	0.274	18.366	4.682
166	1.555	0.309	19.869	5.633
167	1.576	0.318	20.711	6.137
168	1.598	0.322	22.319	6.853
169	1.618	0.333	23.751	7.136
170	1.636	0.343	24.842	7.320
171	1.666	0.356	25.410	7.685
172	1.685	0.385	25.798	8.052
173	1.726	0.409	26.122	8.344
174	1.742	0.433	26.353	8.602
175	1.756	0.453	26.638	8.898
176	1.769	0.463	27.219	9.251
177	1.784	0.507	27.279	10.253
178	1.802	0.523	27.320	10.828
179	1.822	0.528	27.352	10.933
180	1.843	0.541	27.822	11.060
181	1.864	0.549	28.763	11.188
182	1.884	0.559	29.402	11.345
183	1.896	0.571	29.971	11.733
184	1.915	0.584	30.276	12.598
185	1.940	0.598	30.988	12.953
186	1.958	0.613	31.095	13.213
187	1.972	0.624	31.314	14.131
188	1.985	0.629	31.833	14.839
189	1.991	0.629	32.239	15.137
190	1.993	0.638	32.547	15.138
191	1.995	0.648	32.855	15.141
192	2.001	0.659	33.153	15.595
193	2.015	0.663	33.444	15.658
194	2.031	0.671	33.482	15.704
195	2.047	0.681	33.516	15.729
196	2.063	0.693	33.549	16.058
197	2.079	0.709	33.653	16.987
198	2.094	0.725	33.973	17.064
199	2.109	0.740	34.159	17.073
200	2.122	0.754	34.191	17.153
201	2.130	0.767	34.250	17.332
202	2.137	0.775	34.469	17.406
203	2.157	0.787	34.716	17.641
204	2.172	0.795	34.969	17.922
205	2.194	0.803	35.144	18.484
206	2.222	0.854	35.418	18.553
207	2.245	0.859	35.766	18.658
208	2.268	0.872	35.949	18.953

209	2.279	0.892	36.010	19.266
210	2.288	0.896	36.548	19.309
211	2.301	0.903	37.179	19.731
212	2.316	0.924	37.651	19.902
213	2.332	0.938	38.041	20.012
214	2.345	0.941	38.591	20.260
215	2.354	0.951	38.852	20.739
216	2.362	0.966	38.861	21.346
217	2.368	0.979	38.926	21.810
218	2.376	0.980	39.194	22.001
219	2.384	0.981	39.474	22.290
220	2.391	1.005	39.668	22.324
221	2.395	1.016	39.781	22.343
222	2.400	1.022	39.890	22.522
223	2.405	1.028	39.954	22.683
224	2.409	1.035	39.984	22.850
225	2.413	1.041	39.989	22.853
226	2.417	1.045	39.990	22.853
227	2.426	1.051	39.990	22.853
228	2.428	1.055	39.990	22.872
229	2.431	1.059	39.991	22.872
230	2.433	1.064	40.012	22.872
231	2.441	1.069	40.061	22.895
232	2.461	1.071	40.116	22.911
233	2.476	1.072	40.249	22.922
234	2.488	1.073	40.253	22.939
235	2.498	1.081	40.290	23.010
236	2.508	1.083	40.385	23.010
237	2.516	1.084	40.488	23.010
238	2.520	1.085	40.720	23.010
239	2.523	1.086	40.763	23.010

c) Vehicles having composite hydrocarbon emission limitations of 2.00 grams per mile or greater, and composite carbon monoxide emission limitations of 30.0 grams per mile or greater in Section 240.Table A or Section 240.Table B:

	Hydrocarbons		Carbon Monoxide	
Second	Composite	Phase 2	Composite	Phase 2
30	0.407	N/A	3.804	N/A
31	0.415	N/A	3.985	N/A
32	0.423	N/A	4.215	N/A
33	0.436	N/A	4.440	N/A
34	0.451	N/A	4.579	N/A
35	0.464	N/A	4.688	N/A
36	0.468	N/A	4.749	N/A

37	0.475	N/A	4.783	N/A
38	0.487	N/A	4.813	N/A
39	0.506	N/A	4.876	N/A
40	0.530	N/A	5.104	N/A
41	0.549	N/A	5.217	N/A
42	0.569	N/A	5.383	N/A
43	0.588	N/A	5.571	N/A
44	0.609	N/A	5.888	N/A
45	0.621	N/A	6.199	N/A
46	0.636	N/A	6.245	N/A
47	0.649	N/A	6.318	N/A
48	0.666	N/A	6.418	N/A
49	0.679	N/A	6.540	N/A
50	0.696	N/A	6.690	N/A
51	0.712	N/A	6.875	N/A
52	0.727	N/A	7.029	N/A
53	0.745	N/A	7.129	N/A
54	0.760	N/A	7.359	N/A
55	0.776	N/A	7.722	N/A
56	0.797	N/A	8.017	N/A
57	0.814	N/A	8.249	N/A
58	0.826	N/A	8.425	N/A
59	0.837	N/A	8.563	N/A
60	0.849	N/A	8.686	N/A
61	0.862	N/A	8.804	N/A
62	0.872	N/A	8.916	N/A
63	0.887	N/A	9.025	N/A
64	0.895	N/A	9.138	N/A
65	0.903	N/A	9.250	N/A
66	0.925	N/A	9.354	N/A
67	0.933	N/A	9.457	N/A
68	0.945	N/A	9.575	N/A
69	0.959	N/A	9.728	N/A
70	0.970	N/A	9.938	N/A
71	0.980	N/A	10.140	N/A
72	0.988	N/A	10.222	N/A
73	0.997	N/A	10.261	N/A
74	1.022	N/A	10.278	N/A
75	1.037	N/A	10.290	N/A
76	1.051	N/A	10.715	N/A
77	1.064	N/A	10.790	N/A
78	1.075	N/A	10.844	N/A
79	1.087	N/A	10.921	N/A
80	1.097	N/A	11.010	N/A
81	1.105	N/A	11.090	N/A

82	1.114	N/A	11.136	N/A
83	1.136	N/A	11.136	N/A
84	1.160	N/A	11.165	N/A
85	1.182	N/A	11.191	N/A
86	1.201	N/A	11.205	N/A
87	1.217	N/A	11.211	N/A
88	1.233	N/A	11.211	N/A
89	1.248	N/A	11.211	N/A
90	1.262	N/A	11.211	N/A
91	1.271	N/A	11.220	N/A
92	1.279	N/A	11.294	N/A
93	1.287	N/A	11.332	N/A
94	1.295	N/A	11.355	N/A
95	1.302	N/A	11.383	N/A
96	1.309	N/A	11.410	N/A
97	1.316	N/A	11.433	N/A
98	1.325	N/A	11.516	N/A
99	1.339	N/A	11.820	N/A
100	1.356	N/A	12.104	N/A
101	1.365	N/A	12.344	N/A
102	1.378	N/A	12.781	N/A
103	1.397	N/A	13.472	N/A
104	1.420	N/A	14.405	N/A
105	1.445	N/A	14.808	N/A
106	1.470	N/A	14.965	N/A
107	1.491	N/A	15.121	N/A
108	1.506	N/A	15.372	N/A
109	1.517	0.151	15.530	1.113
110	1.528	0.159	15.687	1.213
111	1.542	0.172	16.018	1.344
112	1.559	0.186	16.527	1.399
113	1.578	0.199	16.810	1.520
114	1.594	0.207	16.961	1.640
115	1.605	0.216	17.120	1.684
116	1.615	0.229	17.135	1.693
117	1.625	0.235	17.249	1.786
118	1.642	0.240	17.451	2.007
119	1.670	0.245	17.509	2.084
120	1.694	0.261	17.605	2.179
121	1.705	0.267	17.734	2.264
122	1.717	0.277	18.049	2.328
123	1.732	0.287	18.447	2.375
124	1.747	0.298	18.592	2.437
125	1.763	0.308	18.657	2.543
126	1.779	0.316	18.796	2.593

127	1.795	0.322	18.952	2.641
128	1.810	0.329	19.137	2.663
129	1.823	0.338	19.329	2.672
130	1.835	0.346	19.519	2.676
131	1.845	0.354	19.707	2.683
132	1.854	0.356	19.882	2.817
133	1.862	0.357	19.905	2.992
134	1.870	0.359	20.049	3.111
135	1.883	0.362	20.460	3.234
136	1.888	0.364	20.746	3.304
137	1.896	0.368	21.068	3.310
138	1.911	0.378	21.380	3.320
139	1.928	0.391	21.748	3.354
140	1.949	0.402	22.046	3.436
141	1.969	0.408	22.348	3.443
142	1.982	0.422	22.397	3.452
143	1.999	0.428	22.407	3.490
144	2.011	0.432	22.417	3.552
145	2.022	0.434	22.922	3.588
146	2.035	0.439	22.951	3.600
147	2.043	0.450	22.976	3.616
148	2.049	0.460	23.017	3.627
149	2.063	0.467	23.073	3.636
150	2.085	0.472	23.161	3.676
151	2.104	0.480	23.218	3.882
152	2.117	0.491	23.253	4.011
153	2.127	0.503	23.337	4.047
154	2.138	0.505	23.425	4.067
155	2.152	0.515	23.534	4.081
156	2.168	0.522	23.652	4.116
157	2.186	0.527	23.739	4.251
158	2.205	0.537	24.606	5.099
159	2.224	0.549	25.615	5.383
160	2.242	0.568	26.073	6.362
161	2.268	0.586	28.496	7.926
162	2.308	0.610	29.772	8.429
163	2.352	0.648	31.056	9.201
164	2.406	0.677	33.351	10.825
165	2.421	0.699	34.890	12.291
166	2.435	0.720	35.937	13.366
167	2.470	0.738	37.012	14.428
168	2.501	0.767	37.892	15.318
169	2.537	0.828	39.028	15.699
170	2.571	0.855	40.406	16.073
171	2.625	0.869	41.379	16.475

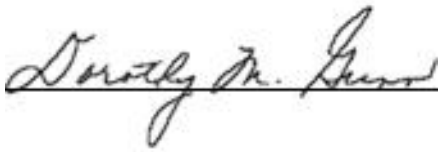
172	2.657	0.885	42.033	17.158
173	2.683	0.900	42.432	17.532
174	2.701	0.941	42.742	17.965
175	2.717	0.979	43.399	18.242
176	2.732	1.002	43.895	18.283
177	2.756	1.025	44.227	18.480
178	2.781	1.047	44.926	19.576
179	2.811	1.065	45.256	20.015
180	2.853	1.089	45.553	20.203
181	2.898	1.109	45.753	20.433
182	2.946	1.133	46.210	21.025
183	2.988	1.158	47.017	21.882
184	3.023	1.184	48.185	22.204
185	3.057	1.209	48.741	22.859
186	3.076	1.222	49.462	23.533
187	3.101	1.231	50.313	24.281
188	3.120	1.239	51.285	25.078
189	3.136	1.254	52.076	25.276
190	3.151	1.278	52.857	25.578
191	3.163	1.300	52.876	25.859
192	3.209	1.313	53.067	25.985
193	3.223	1.324	53.777	26.153
194	3.237	1.340	54.242	26.582
195	3.263	1.376	54.489	27.067
196	3.302	1.387	54.601	27.456
197	3.338	1.402	54.912	27.805
198	3.372	1.417	55.588	28.070
199	3.390	1.432	56.266	28.590
200	3.428	1.446	56.617	28.914
201	3.470	1.460	56.863	29.063
202	3.493	1.477	57.204	29.502
203	3.509	1.492	57.371	29.697
204	3.522	1.501	57.487	29.713
205	3.533	1.510	57.728	29.783
206	3.550	1.522	58.097	29.942
207	3.578	1.561	58.572	30.284
208	3.607	1.585	59.024	30.755
209	3.630	1.597	59.321	31.287
210	3.658	1.607	59.715	31.549
211	3.701	1.627	60.045	31.820
212	3.745	1.645	60.453	32.250
213	3.776	1.656	60.935	32.546
214	3.814	1.663	61.307	32.808
215	3.825	1.669	61.666	33.142
216	3.835	1.674	62.148	33.529

217	3.844	1.685	62.532	33.763
218	3.853	1.705	62.546	33.921
219	3.864	1.711	62.559	33.961
220	3.874	1.735	62.570	33.983
221	3.891	1.752	62.846	34.007
222	3.928	1.760	63.097	34.032
223	3.966	1.774	63.150	34.054
224	4.008	1.778	63.150	34.061
225	4.010	1.797	63.150	34.082
226	4.012	1.802	63.150	34.100
227	4.016	1.804	63.150	34.109
228	4.019	1.806	63.150	34.129
229	4.057	1.810	63.150	34.284
230	4.065	1.814	63.150	34.397
231	4.072	1.827	63.150	34.463
232	4.081	1.833	63.150	34.465
233	4.104	1.837	63.150	34.466
234	4.124	1.841	63.150	34.468
235	4.128	1.845	63.159	34.470
236	4.132	1.851	63.173	34.471
237	4.137	1.855	63.193	34.472
238	4.147	1.857	63.214	34.472
239	4.158	1.860	63.233	34.473

(Source: Added at Ill. Reg. , effective)

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 22nd day of January 1998, by a vote of 7-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board