ILLINOIS POLLUTION CONTROL BOARD
May 21, 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. Second Notice.

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

The Board today adopts for second notice amendments to 35 Ill. Adm. Code 240, Enhanced Vehicle Inspection and Maintenance (I/M) Regulations, also known as IM240. On January 21, 1998, the Illinois Environmental Protection Agency (Agency) filed a proposal to amend the enhanced I/M program. On January 22, 1998, the Board adopted the amendments for first notice publication in the *Illinois Register*. See Enhanced Vehicle Inspection and Maintenance (I/M) Regulations: Amendments to 35 Ill. Adm. Code 240 January 22, 1998, R98-24; see also 22 Ill. Reg. 2720 (February 6, 1998).

Sections 182(b) and 182(c) of the federal Clean Air Act, as amended in 1990 (42 U.S.C. § 7582(b), § 7582(c) (1990)), require the use of I/M programs in areas that do not meet the National Ambient Air Quality Standards (NAAQS) for ozone or carbon monoxide. The Clean Air Act specifies the use of "basic" or "enhanced" I/M programs. "Basic" programs are required in moderate and marginal ozone nonattainment areas with existing I/M programs. "Enhanced" programs are mandated for serious, severe, and extreme ozone nonattainment areas with urbanized populations of 200,000 or more. States are required to submit for approval to the United States Environmental Protection Agency (USEPA) revisions to their State Implementation Plans (SIPs) which fully describe and assure implementation of a satisfactory I/M program. In Illinois, the Chicago and Metro-East St. Louis (Metro-East) areas are classified as "severe" and "moderate" nonattainment areas for ozone. Pursuant to Section 5/13B-5 of Illinois' Vehicle Emissions Inspection Law (625 ILCS 5/13B-5 (1996)), Chicago and Metro-East St. Louis are subject to these I/M regulations.

USEPA has promulgated both final regulations and interim guidelines containing testing standards and procedures for use in a state's enhanced I/M emissions testing program (40 C.F.R. § 51). Illinois' Vehicle Emissions Inspection Law provides the authority for the Board to adopt the regulations necessary for Illinois to meet USEPA's enhanced I/M testing and performance requirements. The Board has previously adopted the bulk of the standards necessary for implementation of the enhanced I/M program (R94-19, 18 Ill. Reg. 18228 (December 14, 1994) and R94-20, 18 Ill. Reg. 18013 (December 12, 1994)). The amendments adopted today for second notice represent the remainder of the mobile source emissions standards necessary for the implementation of the enhanced I/M program and

constitute an integral part of Illinois' enhanced I/M package. Once adopted by the Board, they must be submitted by the Agency as part of the Illinois SIP for final approval by the USEPA.

In sum, these proposed rules contain clarifications and modifications to existing standards, and new standards for the remaining portions of the enhanced I/M testing program. More specifically, these proposed amendments:

(1) replace the current evaporative system testing program (which uses a pressure test and a purge test to test the entire system's integrity) with a fuel cap only inspection;

(2) add "fast-pass" standards to allow vehicles undergoing I/M 240 exhaust emissions tests to be tested more quickly, saving time and money;

(3) add standards for the required on-road sensing test; and

(4) add a program for on-board diagnostic testing that will become mandatory on January 1, 2001.

The adoption by the Board of these proposed amendments to Part 240: Mobile Sources is authorized under Section 28.5 of the Environmental Protection Act (Act) (415 ILCS 5/28.5 (1996)) and mandated by Section 13B-20 of the Vehicle Emissions Inspection Law (625 ILCS 5/13B-20 (1996)). Today, the Board adopts these rules for second notice under the Illinois Administrative Procedure Act (5 ILCS 100/5 (1996)). We have considered the merits of the Agency's proposal and its testimony and find that these regulations are required pursuant to the Vehicle Emissions Inspection Law and adopted in accordance with Section 28.5(d) of the Environmental Protection Act for the reasons discussed below.

PROCEDURAL MATTERS

Section 13B-20 of the Vehicle Emissions Inspection Law (625 ILCS 5/13B-20 (1996)) mandates adoption of enhanced I/M rules by the identical-in-substance rulemaking procedure under Section 7.2 of the Act (415 ILCS 5/7.2 (1996)). It further provides that these proposed amendments are not subject to the requirements of Section 27(b) of the Act (415 ILCS 5/27(b) (1996)). However, most of the federal enhanced I/M scheme is not codified in federal regulations, but exists only as federal guidance. Section 7.2 of the Act, which defines "identical-in-substance" rulemaking and establishes conditions for its use, allows the Board only to adopt federal rules using this mechanism, not federal guidelines. Since, many of the federal requisites underlying these proposed rules are based upon federal guidance, we cannot proceed under Sections 7.2 and 28.4 of the Act with this rulemaking.

The Board previously addressed this issue in R94-19 (18 Ill. Reg. 18228 (December 14, 1994) which also amended the enhanced I/M program. In that rulemaking, major portions of the federal enhanced I/M scheme were also not codified in federal regulations, but existed only as federal guidance. At that time, the Agency suggested and the Board agreed to use the

next-fastest procedural mechanism, rulemaking under Section 28.5 of the Act (415 ILCS 5/28.5 (1996)), known as " fast-track" rulemaking. Section 28.5 fast-track rulemaking is to be applied to "promulgate a rule that the Clean Air Act requires to be adopted." "Requires to be adopted" is defined as referring "only to those regulations or part of regulations for which the United States Environmental Protection Agency is empowered to impose sanctions against the State for failure to adopt such rules." 415 ILCS 5/28.5 (1996). Such was the case for that rulemaking, and is the case in this rulemaking. Here again, most of the federal requisites underlying these enhanced I/M amendments exist only as federal guidance, yet this program is required by the Clean Air Act. Therefore, the Board once again finds that this rulemaking implements the Clean Air Act and is acting to adopt it in accordance with the fast-track requirements in Section 28.5 of the Act.

Section 28.5 contains numerous procedural requirements including specific timeframes that the Board must follow in a fast-track rulemaking. The Board has no discretion to adjust the timeframes under any circumstances. The Board is required to hold one to three hearings within a fixed number of days, and the number of hearings held fixes the number of days the Board has to finally adopt the subject rulemaking. Since only one hearing was held in this rulemaking, the Board has only 130 days after it receives the Agency's proposal to adopt regulations for second notice.

On March 17, 1998, the one hearing on the merits of the proposal was held in Chicago.[1] The second and third hearings originally scheduled for April 14, 1998, and April 28, 1998, respectively, were canceled pursuant to Section 28.5(g) because the Board received no requests that those hearings be held. At hearing, Elizabeth Tracy, manager of the Division of Vehicle Inspection and Maintenance, Michael Hills, engineer in technical services with the Vehicle Inspection Test Program, and James Matheny, engineer manager of technical services with the Vehicle Inspection Test Program, testified on behalf of the Agency.

The Board received three filings in this proceeding.[2] The Agency's prehearing comments were filed by Michael Hills on March 4, 1998. At hearing, the Agency presented the Board with an errata sheet containing additional amendments to Part 240. On April 3, 1998, the Agency filed its post hearing public comment. No additional filings or public comments were filed with the Board during the first notice period.

[1] The transcript of the March 17, 1998, hearing will be referred to as Tr. at __.
[2] The Agency's prehearing comments will be referred to as Pre. Comm. at __; the Agency's errata sheet will be referred to as Errata at __; the Agency's post hearing comments will be referred to as Post Comm. at __.

ANALYSIS

Subpart A: Definitions and General Provisions

Section 240.102: Definitions

Section 240.102 contains the definitions applicable in the I/M program. The Agency proposed amendments necessary to conform the definitions with the program changes it proposed in the remainder of Part 240. First, the Agency proposed that a fuel cap test replace the two tests currently required under the evaporative system testing program. Accordingly, the definitions of "pressure test" and "purge test" are deleted. and the following new terms were proposed: "evaporative system integrity test;" "fuel cap;" "fuel cap leak flow test;" "fuel cap leak flow tester;" "fuel cap pressure decay test;" "fuel cap pressure decay tester;" and "fuel cap visual function test."[3] Stat. of Reas. at 11. All of these terms are applicable to the different fuel cap tests added at Subpart F: Evaporative Test Standards. See discussion at pages 10-12.

The Agency also proposed amending one existing definition and eliminating three other definitions. First, the definition for "high idle" is amended so that it is no longer applicable to the preconditioning mode of a steady-state idle test. See State of Reas. at 11. Next, the following three definitions are entirely deleted. The reasons for their deletions are discussed under the appropriate sections referenced below.

(1) "Tier I" because the exhaust emission standards defined therein are no longer required, and all references to the Tier 1 standards are deleted from Part 240. Those references were removed from Sections 240.162, 204.163, and Section 240.Tables A and B.

(2) "Test procedure" to eliminate any confusion in interpretation. Section 240.141 (currently not being considered by the Board) contains references to "test procedure" in both the heading and within the section itself. The section also contains references to "standards." The current definition of "test procedure" creates confusion as to whether test procedures are different from standards.

(3) "Two speed idle test" because that test is no longer utilized by the Agency. The Agency's procedures at Section 276.204 currently require only a single-speed idle test. While Section 240.125 of the Board's regulations should also have been amended to remove the reference to two-speed idle test, cannot be amended at this time as the Illinois Administrative Procedures Act (5 ILCS 100/5-30(b), (c) (1994)) requires that any amended sections be published in the *Illinois Register* at first notice.

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[3] The Agency's Statement of Reasons will be referred to as State. of Reas. at __.

The Board agrees that the changes proposed by the Agency are necessary to understand all the revisions to the I/M program. Accordingly, these amendments are included in the attached order.

Section 240.104: Inspection

Section 240.104 contains the compliance requirements for motor vehicles which must be inspected under the Vehicle Emissions Inspection Law. Currently this section is a single paragraph which contains the compliance requirements for two sets of vehicles. The first set of vehicles, those subject to inspection under Section 13A of the Vehicle Emissions Inspection law (625 ILCS 5/13A-104 (1996)), must comply with the exhaust emission standards found at Section 240.141. (Section 240.141 is not amended in this rulemaking.) This requirement (unchanged) will now be found in the new subsection (a).

Subsection (b) will contain the compliance requirements for the second set of vehicles, those subject to inspection under Section 13B of the Vehicle Emissions Inspection Law (625 ILCS 5/13B (1996)). Those vehicles will be required to comply with the emission standards found at Sections 240.152, 240.162, 240.163, and 240.172. The Agency also proposed amending the new subsection (b) to require compliance with the new vehicle emission standards for remote sensing diagnostic (RSD) standards and on-board diagnostic (OBD) testing, which are newly proposed at Sections 240.182 and 240.192, respectively. Stat. of Reas. at 12. Finally, the Agency also proposed eliminating the cross-reference to Section 240.173, which contains the purge test.

The Board agrees with the suggested reorganization of Section 240.104 and deletion of the purge test reference. Also, we find that amendments proposed at 240.104(b) are necessary to require inspection and compliance with the new vehicle emission standards for RSD and OBD testing set forth in the cross-referenced Sections 240.182 and 240.192. The cross-reference to the purge test at Section 240.173 is deleted. For the reasons set forth above, the purge test is eliminated under today's proposed rules. These amendments are included in the attached order.

Section 240.105: Penalties

Section 240.105 sets forth penalties for violations of Part 240. The Agency proposes changes to Section 240.105 to reflect the addition of penalties for exceedences of the RSD and OBD standards found at new Section 240.182 and 240.192, respectively, and to eliminate penalties for not meeting the purge test standards formerly contained in Section 240.173 which is being deleted. Stat. of Reas. at 12. Also, at first notice the proposed rules contained several typographical errors which are corrected by today's order. Errata at 1.

The Board finds that these amendments serve to conform the existing rules to the proposed amendments, and they are included in the attached order.

Section 240.106: Determination of Violation

Section 240.106 specifies how violations of the various standards of Part 240 are to be determined. For example, violation of the smoke emission standard at Section 240.103 must be determined using visual observation or a qualified opacity measuring system. As with the changes proposed at Sections 240.104 and 240.105, the Agency proposed adding to this Section the cross-references to the newly proposed RSD and OBD standards, and that the cross-reference to the purge test be eliminated. Stat. of Reas. at 13 and Exhibit 1 at 1. Also, at first notice the proposed rules contained several typographical errors which are corrected by today's order. Errata at 1.

The Board finds that these amendments to the existing rule are necessary to clarify how violations of the RSD or OBD standards will be determined and that the purge test will no longer be considered an element of the I/M program. Accordingly, these amendments are included under Section 240.106 in the attached order.

Section 240.107: Incorporation by Reference

Section 240.107 contains a list of documents incorporated by reference into Part 240. The Agency proposed that the Board amend Section 240.107(c), which contains a reference to a USEPA formal guidance document entitled "Report EPA AA EPSD IM 1, High Tech I/M Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications". Stat. of Reas. at 13. The Agency proposes that this reference be deleted and replaced with USEPA's most recent formal guidance that was updated in June 1996. Stat. of Reas. at 13. The title of the more recent reference document is: "High-Tech I/M Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications: IM240 and Functional Evaporative System Tests, Revised Technical Guidance" (High-Tech Guidance). State of Reas. at 13.

At hearing, the Board questioned the Agency regarding the appropriate address to obtain a copy of the USEPA High-Tech Guidance and whether that address should be included in Section 240.107. Tr. at 21. In its post hearing comments, the Agency confirmed that the following address for the USEPA High-Tech Guidance should be included at Section 240.107: 2525 Plymouth Road, Ann Arbor, Michigan, 48105. PC at 3.

The Board finds that this amendment is necessary to update the reference to the USEPA formal guidance document; it is included in the attached order.

Subpart E: Transient Loaded Mode Test Emission Standards

Section 240.162: Vehicle Exhaust Emission Start-Up Standards and Section 240.163: Vehicle Exhaust Emission Final Standards

Both existing Sections 240.162 and 240.163 make the vehicle exhaust emission standards applicable to vehicles which are subject to inspection under Section 13B-15 of the

Vehicle Emissions Inspection Law. See Section 240.104. Pursuant to Section 240.162, the vehicle exhaust emission start-up standards are applicable to all such vehicles by cross-referencing the standards found in Table A of Part 240. Pursuant to Section 240.163 the vehicle exhaust emission final standards are applicable to all vehicles by cross-referencing the standards found at Table B of Part 240.

The Agency proposed two types of amendments to these sections and tables. First, the Agency proposed that the applicability timeframes now contained in the rules be changed from a fixed date to a "variable" date. Second, the Agency proposed that references to "Tier 1" standards be deleted from both sections and both tables.

Applicability Time Frames

Currently, the applicability timeframes for the vehicle exhaust emission standards is phased. Under the existing rules, the start-up standards were applicable until December 31, 1997, and the final standards became applicable on January 1, 1998. The Agency proposed changing the applicability date for the start-up and final standards from a fixed date (both of which have passed) to a date (unspecified) dependent upon when enhanced I/M testing actually begins. Stat. of Reas. at 13-14. Negotiated changes with the contractor who will be implementing the enhanced I/M program have resulted in revisions to the start-up and final standards dates. Stat. of Reas. at 13. The Agency's test contractor may begin enhanced I/M testing on the first day of any month between December 1998, and June 1999, depending upon certain conditions being met. Stat. of Reas. at 14. Therefore, the Agency proposes that the start-up standards still be phased-in over a two year period before the final standards become applicable. Since the ending date for the start-up standards cannot be fixed until enhanced I/M testing begins, the initial date that the final standards replace the start-up standards cannot yet be specified. State of Reas. at 14.

The current ending date for the start-up vehicle emission standards in Section 240.162 is December 31, 1997. That date is past. Because its contractor for enhanced I/M testing will be allowed to start testing on the first day of any month between December 1998 and June 1999, the Agency proposed that the start-up standards become applicable sometime after December 1, 1998 and be applicable for two years. The Board accepts that the beginning date for enhanced I/M testing must be a floating date rather than a fixed date so the Agency's test contractor may have a six month period within which to initiate the enhanced I/M testing. The Board agrees with the Agency's proposed two years to make the transition from these standards to the final standards. Therefore, the previous ending date for start-up standards in Section 240.162 is deleted and replaced with a description that these standards will be applicable for two years after the enhanced I/M testing is begun. This means that the start-up standards will become applicable on the first day of the month between December 1998 and June 1999 and expire no later than June 2001. Tr. at 44.

Given that the ending date for the start-up standards is not yet established, the actual date for the final standards can no longer be a fixed date. Again, Section 240.163 currently provides that the final standards became applicable on January 1, 1998. Therefore, the Board

will amend Section 240.163 to provide that the final standards will become applicable at the conclusion of the testing for the start-up standards; no fixed date will be included in the rule at this time. As discussed above, that date will be two years after the enhanced I/M testing is begun, *i.e.*, sometime between December 2000 and June 2001. The Board urges the Agency to inform it when this date can be established, *i.e.*, notify the Board as to the date its test contractor begins enhanced I/M testing, so that Section 240.163 can be amended to include a fixed date. Such an amendment will simplify the rule for the regulated community and those enforcing the regulations.

Elimination of Tier 1 Vehicle Emission Standards

Sections 240.162 and 240.163 reference the Tier 1 emission standards found in Tables A and B. Tables A and B contain vehicle emission standards for three pollutants: hydrocarbons, carbon monoxide, and oxides of nitrogen. The emission levels vary depending upon the vehicle model years, *e.g.*, 1991-1995, 1983-1990. One model year is designated "Tier 1(1994+)." Tier 1 is currently defined at Section 240.102 to mean:

> 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 existing standards, beginning with 40% of the vehicles sold in 194, 80% in 1995, and 100% thereafter.

As mentioned in the discussion of Section 240.102, the Agency proposed that this definition be deleted. The Agency proposed that the Tier 1 standards be eliminated because the USEPA's High Tech Guidance now recommends that the vehicle emission standards apply only to all 1996 and newer "light duty vehicles," "light duty trucks 1," and "light duty trucks 2". Stat. of Reas. at 14; see High Tech Guidance, Exh. 15.b at 2-3. Formerly, the guidance recommended Tier 1 standards apply to all model year 1996 and newer vehicles and model year 1994 and new vehicles certified to Tier 1 standards. Furthermore, the Agency maintains that the elimination of "Tier 1" requirements for these model year vehicles will simplify testing operations. Stat. of Reas. at 14. Tier 1 vehicles can only be identified by inspecting/evaluating the vehicle emission labels located in the engine compartment. Stat. of Reas. at 14. Therefore, the hood of the vehicle must be opened which the Agency contends increases both test time and the potential for vehicle damage.

The Board finds that removing the Tier 1 standards from Tables A and B, and the cross-references to Tier 1 in Sections 240.162 and 240.163 are appropriate. The Board will delete these requirements and references since the USEPA recommends in its High-Tech Guidance that the these vehicle emission standards be applicable only to 1996 and newer "light duty vehicles," light duty trucks 1," and "light duty trucks 2."

Section 240.164: Vehicle Exhaust Emission Fast-Pass Standards

The Agency proposed adding new "fast-pass" standards for the IM240 exhaust emission test. Stat. of Reas. at 15; Pre. Comm. at 2. Table C of Part 240 contains the new vehicle exhaust emission fast-pass standards, and according to a new Section 240.164, these are the standards to be applied to vehicles that must be inspected pursuant to Section 240.161 utilizing the IM240 transient loaded mode exhaust emission test specified in the Agency's rules at 35 Ill.Adm.Code 276. The IM240 transient loaded mode exhaust test procedure, developed by USEPA, will be used to measure exhaust emissions of hydrocarbons and carbon monoxide while the vehicle is operated on a chassis dynamometer. Pre. Comm. at 2. The IM240 driving cycle consists of a series of accelerations, decelerations, and high-speed cruise modes over a 240-second period which, due to the load or resistance provided by the dynamometer, allows for measurement of emissions under simulated on-road driving conditions. Pre. Comm. at 2.

The Agency asserts that the IM240 standards (currently at old Section 240.164) require a full 240-second driving cycle for all tests, regardless of how clean the vehicle's emissions appear early on in the driving cycle. Pre. Comm. at 2. The proposed fast-pass standard will allow vehicles to pass the IM240 test much more quickly by enabling vehicles which exhibit clearly clean emission to pass the IM240 exhaust emission test before the entire 240-second period has elapsed. Stat. of Reas. at 15; Pre. Comm. at 2. Essentially, the fast-pass standard allows for more vehicle testing in less time, thereby reducing motorists' testing time and resulting in a less expensive test network for the State. Stat. of Reas. at 15; Pre. Comm. at 2.

The Board finds that the Agency's proposed fast-pass standards will reduce testing time, and thereby allow for testing volume to be increased, and result in a less expensive test network. Accordingly, the Board deletes old Section 240.164 and adopts new Section 240.164 and Table C for second notice.

Section 240.165: Compliance Determination

The Agency proposes moving the current Section 240.164 to new Section 240.165(a), the only changes in the existing language is to update the title of the referenced document. See discussion at page 6 regarding Section 240.107.

The Agency also proposed a new subsection (b), which contains compliance determination procedures for fast-pass standards, and is based upon USEPA's High-Tech Guidance. Stat. of Reas. at 16. Compliance with fast-pass IM240 standards is determined by measuring the vehicle's cumulative emissions of each pollutant in each second, and comparing them to separate cumulative fast-pass standards for each pollutant for each second of the test. Pre. Comm. at 2.

The Agency noted that like the full-cycle IM240 standards, the proposed fast-pass standards establish two methods in which a vehicle can pass: composite and Phase 2. Pre. Comm. at 3. In the case of fast-pass standards, compliance determination with composite fast-

pass standards begins at second 30 and is based upon emissions accumulated from the start of the IM240 test. Pre. Comm. at 3. Compliance determination with Phase 2 fast-pass standards begins at second 109 and is based upon emissions accumulated from second 94 of the IM240 test. Pre. Comm. at 3. If the vehicle does not meet all of the fast-pass standards within 240 seconds, then the pass/fail determination for each exhaust component will be based upon compliance with the composite or Phase 2 emission standards for the full driving cycle located in 35 Ill. Adm. Code 240.162 and 240.163. Those are the start-up and final vehicle exhaust emission standards discussed above.

The Board agrees that the amendments proposed by the Agency are necessary. Section 240.165(a) now contains the method for determining compliance with the IM240 standards when the full driving cycle test is used, *i.e.*, Tables A and B. This regulation is simply relocated from Section 240.164 which is necessary to accommodate the addition of fast-pass standards at Section 240.164. The Board modifies subsection (a) slightly by adding a title, "Vehicle Exhaust Emissions Start-Up and Final Standards." Section 240.165(b) is new. It contains the method for determining compliance with the new fast-pass standards located in Table C of Part 240. Obviously, this section is necessary to provide a means for determining whether vehicles pass the "fast-pass" standards in Table C. The Board amends subsection (b) by removing the reference in the title to "Compliance Determination" to avoid redundancy with the Section 240.165 heading, which already includes this phrase. 240.165 is adopted for second notice with these amendments.

Subpart F: Evaporative Test Standards

Section 240.171: Applicability

Subpart F contains the standards and regulations concerning evaporative testing. Currently, Section 240.171 contains two rules about the applicability of the evaporative system integrity test standards found in Subpart F. The Agency proposed removing subsection (b) which concerns the purge standards currently located in Section 240.173. The Agency proposed deleting Section 240.171(b) because recent amendments to the Vehicle Emission Inspection Law made purge testing optional rather than mandatory. Stat. of Reas. at 16; see Section 10 of P.A. 90-475 (eff. August 17, 1997). Purge testing has been eliminated as a mandatory requirement of the enhanced I/M program because the test cannot currently be performed reliably or economically in the high through-put, centralized test system to be built in Illinois. Stat. of Reas. at 16; Pre. Comm. at 6. As Section 240.171(b) will be deleted, the Agency also proposed removing the paragraph lettering for Section 240.171(a), leaving the text in place. Stat. of Reas. at 16.

The Board agrees that since purge testing is no longer mandatory and the Agency claims that it cannot be reliably or economically performed in the I/M testing system it is overseeing in Illinois, the requirement to perform purge testing should be deleted. See *infra* concerning Section 240.173. Therefore Section 240.171(b), the rule about its applicability is deleted.

Section 240.172: Evaporative Integrity Test Standards

Section 240.172 establishes standards for vehicles subject to the evaporative system integrity test. The proposed changes are premised on the Agency's determination that it is infeasible to perform a full pressure test of a vehicle's entire evaporative system. Pre. Comm. at 3. The Agency, therefore, proposed that it inspect the vehicle's fuel cap, which is a major component of the evaporative system. Stat. of Reas. at 17.

The Agency has identified that, in addition to visual inspection, there are two different instruments used for testing a fuel cap for leakage: a "leak flow" tester or a "pressure decay" tester. Stat. of Reas. at 17; Pre. Comm. at 3. The Agency explains that the fuel cap leak flow test determines fuel cap integrity by using a leak flow tester that measures actual leakage flow rate through the fuel cap and compares it to the flow through a designated master orifice. Pre. Comm. at 3-4. The fuel cap pressure decay test determines fuel cap integrity by measuring the actual pressure decay over a period of ten seconds while the fuel cap is pressurized. Pre. Comm. at 4. Fuel caps that are proper for the vehicle being tested, but do not fit either the leak flow or pressure decay fuel cap tester (due to the lack of a proper adapter), will be tested using a visual functional test. Pre. Comm. at 4. This test will involve a visual inspection of the fuel cap for damage or missing parts. Pre. Comm. at 4.

The Agency is currently using a leak flow test device for advisory testing, but explained that it desires the flexibility to use either the leak flow or the pressure decay method, since in the enhanced I/M program, the pressure decay method will be used in the testing lanes, and the leak flow method will be used for gas cap-only retests. Stat. of Reas. at 17. By testing the fuel cap instead of the full evaporative system, the Agency testifies that it will eliminate any problems created by intrusive, underhood inspections and will still receive 40% of the emission reduction credit that would be received if a test of the entire system were performed. Stat. of Reas. at 17; Pre. Comm. at 4. In addition, problems detected with the fuel cap test can be corrected with a simple replacement of the fuel cap. Pre. Comm. at 4. Therefore, time and cost to the motorist created by the fuel cap test will be quite minimal when compared to the full evaporative system test. Pre. Comm. at 4.

At hearing, the Board asked the Agency to confirm the correct heading for this section and all other references to this test. Tr. at 22. The Agency replied that this section and all references to this test should be referred to as the "Evaporative System Integrity Test Standard." Tr. at 22.

The Board finds that the Agency's proposed amendments are warranted to perform an evaporative system integrity test. Using either the leak flow, pressure decay, or the visual function test will allow for flexibility to efficiently conduct the evaporative system integrity test.

Section 240.173 Evaporative System Purge Test Standards

Section 240.173 contains the standards for the evaporative system purge test. The purge test was included as part of the enhanced I/M testing program in 1994 because, according to the Agency, the USEPA insisted it be in the program. Stat. of Reas. at 18; see Enhanced Vehicle Inspection and Maintenance (I/M) Regulations Amendments to 35 Ill. Adm. Code 240 (December 1, 1994), R94-20, slip op. at 4. The Agency explained that USEPA has subsequently determined that the problems involved with trying to implement this test in a high through-put, centralized testing program cannot presently be overcome. Stat. of Reas. at 18. Furthermore, the Vehicle Emission Inspection Law has been amended to eliminate the mandatory requirement for the purge test. See P.A.90-475, effective August 17, 1997. Consequently, the Agency proposed eliminating the purge test as a mandatory part of the required enhanced I/M test. Stat. of Reas. at 18.

The Board finds that the purge test standards of the evaporative system should be eliminated from the state's enhanced I/M program because of the subsequent determination by USEPA and the Agency that the purge test could not be quickly, reliably, or economically performed. Section 240.173 is deleted from Part 240 in the attached order for second notice.

Subpart G: On-Road Remote Sensing Testing

The Agency proposed a new subpart to fulfill new requirements of the Vehicle Emission Inspection Law that the enhanced I/M program include on-road remote sensing testing. Stat. of Reas. at 18; see 625 ILCS 5/13B-20 (1996). On-road remote sensing testing is also required by USEPA as a part of the enhanced I/M program. State of Reas. at 19; see 57 Fed. Reg. 52950, 52967 (November 5, 1992); 40 § C.F.R. 51.371.

Specifically, in a new Section 240.182, the Agency proposed emission standards for on-road remote sensing for hydrocarbons and carbon monoxide. In a new Section 240.181, it proposed that these standards be applicable to all vehicles that will receive on-road tests pursuant to 35 Ill. Adm. Code 276, *i.e.*, all 1968 and new "light duty vehicles," "light duty trucks 1," and "light duty trucks 2." Finally, in a new Section 240.183, it proposed that compliance be measured using test procedures adopted by the Agency. Tr. at 41. In that section, the Agency also provided the procedures for notifying the vehicle owner that the vehicle failed the on-road test. Stat. of Reas. at 18-19. Pursuant to Section 13B-20 of the Vehicle Emission Inspection Law, the vehicle owner is not obligated to do anything until the vehicle has failed the on-road emission sensing testing for a second time. This limitation is legislatively mandated to avoid a determination of non-compliance based upon false failures of the on-road test.

The Agency proposed the emission standards for on-road remote sensing testing based upon a study by the Wisconsin Department of Natural Resources. State of Reas at 19. The Agency explained that its proposal is based upon this study because the USEPA did not provide any guidance for such standards. State of Reas. at 19. At hearing, Mr. Hills testified that the Agency had selected the Wisconsin study because it was the most comprehensive in

that it tested 71,000 vehicles. Tr. at 26. The false failure rate in the Wisconsin study was three percent. Tr. at 28.

The Agency advocates this program because it can be used on in-use vehicles and is non-invasive, and according to the Agency, it is an available technology. Pre. Comm. at 4. The test procedures involve using an open-path infrared sensor to measure the concentrations of hydrocarbons, carbon monoxide, and carbon dioxide emitted from the tested in-use vehicle. Pre. Comm. at 4; Tr. at 28, 39. The testing apparatus is not manned, but rather temporarily installed at testing points, such as entrance ramps to expressways. Tr. at 28. The apparatus would likely be placed at on-ramps to expressways rather than off-ramps, to read emissions from a vehicle that is accelerating. Tr. at 28-29. Mr. Hills testified that measuring vehicle emissions from a decelerating vehicle may cause false failures. Tr. at 28.

Mr. Hills further explained that an infrared beam from the testing apparatus takes a snapshot of emissions coming out of the tail pipe of a vehicle that crosses the beam. Tr. at 28. The infrared beam measures the concentration of hydrocarbons, carbon monoxide, and carbon dioxide emitted from a vehicle. Tr. at 28. To identify the tested vehicle, a camera automatically photographs the vehicle's license plate. Pre. Comm. at 4-5; Tr. at 28.

Section 240.183 provides that compliance is determined based upon procedures adopted by the Agency. Compliance is determined by comparing the measured emission concentration of each pollutant to the on-road remote sensing emission standard contained in Section 240.182. Pre. Comm. at 5. In response to a Board question at hearing regarding the adoption of on-road diagnostic procedures, the Agency stated that it has not yet drafted those procedures. Tr. at 39. The Agency explained that it intends to adopt procedures at Part 276 within three to six months after hearing that will ensure the following: locating the remote sensing diagnostic devices to minimize false passes; a representative cross-section of vehicles in the area; and safety of the operator's equipment. Tr. at 40.

The Board requests that the Agency notify the Board when its procedures are adopted under the Administrative Procedures Act. The Board will then determine the best way to communicate this information to the regulated public either by amending this rule to include a specific citation or through other means.

Section 240.183 also includes the procedures the Agency must use to notify the vehicle's owner that the vehicle failed the on-road remote sensing emission testing. In no case may such a notice be sent to vehicles registered outside the affected counties. The affected counties are listed at Section 13B-5 of the Vehicle Emissions Inspection Law.

There is a two step notice procedure when a vehicle fails the on-road emission sensing test. The first time the vehicle fails the test, the notice must notify the vehicle owner of the time and location where the on-road remote sensing emission test was taken, and the emission readings and emission standards exceeded. Although the vehicle's emissions exceeded the standards set out in Section 240.182, there is no violation until the vehicle fails the test for a

second time. Again, this is to help prevent non-compliance based upon a false failure of the vehicles.

The second time the vehicle fails the on-road remote sensing emission test, and that second exeedence occurs prior to the next scheduled in-cycle emissions test, the Agency must notify the vehicle owner of the second failure. Pre-Comm. at 5. In so doing, the Agency must include the same information required in the first notice. However, in this second instance, the Agency must also notify the vehicle owner of the obligation to take the vehicle for inspection at a local inspection station. This inspection is referred to as an "out-of-cycle follow up inspection." Again, at hearing, Mr. Hills explained that the two failure rule is necessary because it will prevent false failures and it is required by the Vehicle Emission Inspection Law (625 ILCS 13B-15 (1996)).

The Board finds that the Agency's proposed rules for the on-road remote sensing emission testing meet the requirements of the Vehicle Emission Inspection Law. Therefore, the Board's order contains the language modified slightly from that proposed by the Agency. In addition to fulfilling statutory requirements, the Board hopes the on-road remote sensing emission testing will be an effective tool for evaluating the effectiveness of enhanced I/M on the in-use performance of vehicles as well as an effective means for identifying vehicles that, between in-cycle I/M inspections, have an increase in exhaust emissions.

Subpart H: On-Board Diagnostic Test Standards

The Agency proposed a new subpart to contain the necessary rules for the on-board diagnostic (OBD) program. The OBD system is used on vehicles, in part, as an emission control diagnostic system that is capable of identifying deterioration or malfunction in certain vehicle components which could cause increase in emissions that exceed the emission standards. Pre. Comm. at 5. If the OBD system detects any deterioration or malfunction, a fault code is recorded in the system for later retrieval and the malfunction indicator light (MIL) is illuminated on the dashboard. Pre. Comm. at 5. The OBD test is conducted by connecting the in-lane computer test system to the vehicle's OBD system. Pre. Comm. at 6. The test system will then send a request to determine the readiness of the vehicle's OBD system. Pre. Comm. at 6. The test system will then download the MIL status and trouble code information to the vehicle test record. Pre. Comm. at 6. Pass/fail determination will be made by comparing the MIL status and trouble code information to the OBD test standards proposed at Section 240.192. Pre. Comm. at 6.

The regulations proposed by the Agency parallel in part those required under the enhanced I/M program under federal law pursuant to the Clean Air Act, as amended (42 U.S.C. § 7582(b), § 7582(c) (1990)) and state law pursuant to Vehicle Emission Inspection Law (625 ILCS 5/13B-20(1996)). When the Agency filed its proposal, federal law required that states adopt a two step OBD program. First, USEPA required OBD testing in all I/M programs beginning January 1, 1998. 61 Fed. Reg. 40939, 40946 (August 6, 1996); see 40 C.F.R. § 51.373; Tr. at 34. Second, USEPA required that the enhanced I/M program begin to "pass" or "fail" vehicles based upon compliance with the OBD standards by January 1,

2000. 61 Fed. Reg. 409939, 40946 (August 6, 1996); see 40 C.F.R. 51.357(b)(4), 85.222; Tr. at 35. However at the time it filed its proposal, the Agency also informed the Board that USEPA intended to propose that this date be delayed until January 1, 2001 (Letter from Gay MacGregor, Director of Regional and State Programs Division, Office of Air and Radiation, USEPA, to Air Division Directors, received by the Agency on November 4, 1997). State of Reas. 21; 62 Fed. Reg. 66841 (December 22, 1997). On December 22, 1997, USEPA did just that; it proposed a rule delaying the initial date until January 1, 2001. Since hearing, USEPA adopted a final rule delaying the implementation of the OBD testing standards until January 1, 200l. 63 Fed. Reg. 24429 (May 4, 1998). The Board takes official notice of this federal action.

Based upon the December 22, 1997 proposed USEPA rule and the federal guidance (letter), the Agency asked the Board to adopt OBD testing; however, the Agency requested that only OBD testing be implemented, and that the Board not make mandatory pass/fail testing. See State of Reas. at 21; Tr. at 34-35. The Agency sought to have the testing portion of the OBD program adopted and implemented to allow it to gain more experience about OBD testing before the OBD program becomes mandatory. Tr. at 31; State of Reas. at 21. The Agency's request for testing only stems from USEPA's original adoption of OBD testing standards. Tr. at 34-35; see 61 Fed. Reg. 40940 (August 6, 1996). In that original rule, USEPA required OBD testing in all I/M programs beginning January 1, 1998, but it did not require that mandatory pass/fail commence until January 1, 2000. See 40 C.F.R. § 51.373, § 85.2207. USEPA noted that, "[d]uring this two year test-only period, EPA in cooperation with states and motor vehicle manufacturers hopes to gather data on the effectiveness of OBD." 61 Fed. Reg. at 40940.

In the final rule delaying the mandatory pass/fail date for OBD testing to January 1, 2001, USEPA amended 40 C.F.R. § 51.373, which now provides that on-board diagnostic checks shall be implemented by January 1, 2001. 63 Fed. Reg. 24429, 24433 (May 4, 1998). In response to comments regarding whether a state could implement the OBD testing before the January 1, 2001, deadline, USEPA indicated there are benefits to implementing the OBD testing before the mandatory pass/fail date: increased consumer knowledge and acceptance of OBD testing and the opportunity to work through start-up problems such as complications with equipment and network compatibility. 63 Fed. Reg. at 24431. The final rule, however, does not mandate that the states include OBD testing prior to January 1, 2001.

When it finalized the one year extension of the OBD program, USEPA noted the states are required to amend their I/M SIP submittals to include the OBD program within two years of the federal promulgation of the OBD program, *i.e.*, these SIP packages are due no later than August 6, 1998, because the initial OBD program was federally promulgated on August 6, 1996. Some commentators questioned whether this date should be extended since USEPA has not finalized all of its OBD rules. USEPA acknowledged that the time for developing such a SIP amendment is short, but pointed out that it does not require states to fully develop their OBD program as part of this SIP submission. Rather USEPA will only require that in their OBD SIP submittals, the states commit to implementing the OBD program no later than January 1, 2001. 63 Fed. Reg. at 24429.

Three rules are proposed. First, Section 240.191: Applicability sets forth that the on-board diagnostic test is advisory only and therefore a vehicle which fails the test does not fail the vehicle emission test. It also provides that the advisory OBD test is to be performed on all 1996 and new "light duty vehicles," "light duty trucks 1," and "light duty trucks 2," required to meet the standards for OBD equipment contained in relevant federal rules (see 40 C.F.R. § 86.094-17). Finally, this section provides that such vehicle must be inspected using OBD testing procedures found at 35 Ill. Adm. Code 276. As of the date of hearing, the Agency had not yet adopted such rules. Stat. of Reas. at 20-21. However, the Board notes that there is sufficient time after final adoption of this rule and its applicability for the Agency to develop such procedures.

Section 240.192 contains the on-board diagnostic test standards. The standards are those required by federal regulations for OBD test standards. They are taken from the "Inspection/Maintenance Program Requirement – On-Board Diagnostic Checks," Final Rule, 63 Fed Reg. 24429 (May 4, 1998). See also Stat. of Reas. at 21. The pass/fail determination will be made by comparing the MIL status and trouble code information to the proposed OBD test standards set forth in Section 240.192.

Also in Section 240.192, the Board proposes deletion of phrase "as defined by SAE J2012" as the reference is both confusing and redundant. On August 6, 1996, USEPA adopted final rules implementing on-board diagnostic test standards. 61 Fed. Reg. 40940, 40946 (August 6, 1996). In doing so, USEPA identified under what circumstances a vehicle shall fail the on-board diagnostics test. USEPA adopted its procedures from a list contained within the Society of Automotive Engineers', SAE J2012 Diagnostic Trouble Code Definitions. As Section 240.192 explicitly sets forth the 43 OBD codes under which OBD failure shall be determined, the specific reference to SAE J2012 is unnecessary.

Finally, new Section 240.193 sets forth compliance determination for OBD testing standards. The Agency proposed that compliance be determined through inspection of the on-board diagnostic connector, the malfunction indicator light and comparing the fault codes down loaded from the on-board diagnostic system with the standards contained in Section 240.192. This inspection must be conducted using the procedures to be adopted by the Agency at 35 Ill. Adm. Code 276.208. Stat. of Reas. at 22. According to the Agency, these will be the same regulations promulgated by the USEPA. Stat. of Reas. At 22.

The Board finds that these regulations providing for an on-board diagnostic testing program is warranted. Although the State is not currently required to have in place an on-board diagnostic program as part of its enhanced I/M program, such a program is federally mandated by January 1, 2001, and the State is required to submit by August 6, 1998, a SIP amendment which commits the State to this program.

Because USEPA has now adopted a final rule delaying implementation of the mandatory pass/fail OBD testing until January 1, 2001, the Board will include January 1,

2001, as the day OBD programs adopted in Subpart H become mandatory. The OBD program adopted at Subpart H will satisfy USEPA's SIP requirement.

The Board will not adopt the "advisory" testing program proposed by the Agency. This testing program is no longer required under the Clean Air Act. Therefore, the Board does not have the authority to adopt such a program in this rulemaking. As discussed *infra* at page 3, the Board can only promulgate a rule under Section 28.5 fast-track rulemaking if the Clean Air Act requires such a rule. See 415 ILCS 28.5(c) (1996). All "non-required" rules may be considered in a second docket which proceeds under the Board's routine rulemaking authority. See 415 ILCS 5/28.5(j) (1996). Should the Agency still desire such an interim program, it must file such a rulemaking proposal under Title VII of the Act.

Section 240.Tables A and B

Section 240.Table A, Vehicle Exhaust Emission Start-Up Standards, and Table B, Vehicle Exhaust Emission Final Standards, sets forth emissions standards for light duty vehicles, light duty trucks 1, and light duty trucks 2. The Agency proposes eliminating the reference to "Tier 1" in this table as "Tier 1" vehicles requires evaluation of vehicle emission labels located in the engine compartment. Stat. of Reas. at 22. Access to this information requires opening the hood, which increases both test time and the potential for vehicle damage. Stat. of Reas. at 14, 22. Therefore, eliminating the "Tier 1" requirements for these model year vehicles will simplify testing procedures. Stat. of Reas. at 14, 22.

The Board finds the foregoing proposed changes are warranted and accordingly adopts the changes as offered by the Agency.

Section 240.Table C

The Agency proposes new Section 240.Table C, entitled Vehicle Exhaust Emission Fast-Pass Standards, based upon USEPA guidance and to allow vehicles to more quickly pass the IM240 test. Stat. of Reas. at 23, 15. The fast-pass standards allow higher throughputs to be achieved, reducing time for the motorists and resulting in a less expensive test network for the State.

At hearing, the Board inquired about apparent errors in calculation in Table C. Tr. at 22. The Board identified two of these errors. Tr. at 22-24. In its post hearing comments, the Agency noted that it had inadvertently used incorrect information in preparing the three tables found in Table C; consequently, the Agency identified several additional errors in calculation. PC at 2. The Agency explained that in preparing the original proposal for rulemaking, it erroneously used outdated fast-pass standards. PC at 2. The Agency clarified that the USEPA High-Tech Guidance standards should be used as a basis for determining the values in the three tables in Table C. PC at 2. The Agency provided an attachment to its post hearing comments, highlighting the additional corrections that should be made to Table C.

The Board finds that new Section 240.Table C is necessary to provide vehicle exhaust emission standards for the fast-pass testing procedure. The Board agrees that the additional changes suggested by the Agency in its post hearing comment should be made to provide uniformity in understanding the fast-pass standards. The Board adopts the table as proposed and subsequently amended by the Agency.

CONCLUSION

The Board today adopts for second notice amendments to 35 Ill. Adm. Code 240.

ORDER

The Board directs the Clerk of the Board to cause the submission of the following proposal to the Joint Committee on Administrative Rules:

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

SUBPART A: DEFINITIONS AND GENERAL PROVISIONS

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240.101 Preamble
240.102 Definitions
240.103 Prohibitions
240.104 Inspection
240.105 Penalties
240.106 Determination of Violation
240.107 Incorporations by Reference

SUBPART B: EMISSIONS

Section
240.121 Smoke Emissions
240.122 Diesel Engine Emissions Standards for Locomotives
240.123 Liquid Petroleum Gas Fuel Systems
240.124 Vehicle Exhaust Emission Standards
240.125 Compliance Determination

SUBPART C: HEAVY-DUTY DIESEL SMOKE OPACITY STANDARDS AND TEST PROCEDURES

Section
240.140 Applicability
240.141 Heavy-Duty Diesel Vehicle Smoke Opacity Standards and Test Procedures

SUBPART D: STEADY-STATE IDLE MODE TEST EMISSION STANDARDS

Section
240.151 Applicability
240.152 Steady-State Idle Mode Vehicle Exhaust Emission Standards
240.153 Compliance Determination

SUBPART E: TRANSIENT LOADED MODE TEST EMISSION STANDARDS

Section
240.161 Applicability
240.162 Vehicle Exhaust Emission Start-Up Standards
240.163 Vehicle Exhaust Emission Final Standards
240.164 Vehicle Exhaust Emission Fast-Pass Standards
240.1645 Compliance Determination

SUBPART F: EVAPORATIVE TEST STANDARDS

Section
240.171 Applicability
240.172 Evaporative System ~~Pressure~~ Integrity Test Standards
~~240.173 Evaporative System Purge Test Standards~~

SUBPART G: ON-ROAD REMOTE SENSING TEST EMISSION STANDARDS

240.181 Applicability
240.182 On-Road Remote Sensing Emission Standards
240.183 Compliance Determination

SUBPART H: ON-BOARD DIAGNOSTIC TEST STANDARDS

240.191 Applicability

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] (see 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 functional 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 (+) 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 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 Vehicle Emissions Inspection Law [625 ILCS 5/13B-15] 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 _____ I 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 240.104(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 240.104(b), 240.152, 240.162, 240.163, 240.172, ~~and~~ 240.182, and 240.192 ~~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, or 240.192 ~~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), 2565 Plymouth Road, Ann Arbor, MI 48105. ~~Report EPA-AA-EPSD-IM-93-1, 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: 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: 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~~Compliance Determination~~

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: Old Section 240.164 renumbered to Section 240.165 and new Section 240.164 added at _____ Ill. Reg. _____, effective _____)

Section 240. ~~164~~165 Compliance Determination

a) Vehicle Exhaust Emission Start-Up and Final Standards - 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: IM240 and Functional Evaporative System Tests, Revised Technical Guidance," incorporated by reference at Section 240.107 of this Part.

b) 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: IM240 and Functional Evaporative System Tests, Revised Technical Guidance," incorporated by reference at Section 240.107 of this Part.

(Source: Renumbered from Section 240.164 and amended 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 Integrity 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 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 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 cc/min of air at 30 + 1 inches of water column; orThe 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 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 C.F.R. § 86.094-17 and which are inspected utilizing the on-board diagnostic test procedures adopted by the Agency in 35 Ill. Adm. Code 276. Vehicles which receive a result of fail do not thereby fail their emissions test until January 1, 2001.

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

Section 240.192 On-Board Diagnostic Test Standards

Vehicles subject to on-board diagnostic 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 on-board diagnostic codes 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 on-board diagnostic vehicle connector, malfunction indicator light, and fault codes using the on-board diagnostic test procedures adopted by the Agency and specified in 35 Ill. Adm. Code 276.

(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	0.530
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	22.661
224	2.409	1.035	39.984	22.666
225	2.413	1.041	39.989	22.667
226	2.415	1.045	39.990	22.668
227	2.417	1.051	39.990	22.669
228	2.419	1.055	39.990	22.670
229	2.420	1.059	39.991	22.671
230	2.421	1.062	40.012	22.671
231	2.423	1.063	40.061	22.672
232	2.425	1.063	40.116	22.673
233	2.427	1.063	40.249	22.673
234	2.429	1.064	40.253	22.673
235	2.430	1.064	40.290	23.674
236	2.431	1.066	40.385	23.675
237	2.432	1.069	40.488	23.675
238	2.433	1.072	40.720	23.675
239	2.434	1.075	40.763	23.677

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

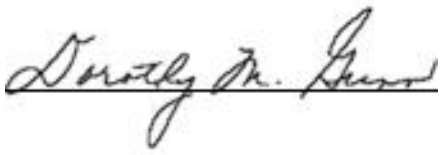
180	2.853	1.089	45.553	20.203
181	2.898	1.109	45.753	20.433
182	2.946	1.133	46.210	21.025
183	2.988	1.158	47.017	21.882
184	3.023	1.184	48.185	22.204
185	3.057	1.209	48.741	22.859
186	3.076	1.222	49.462	23.533
187	3.101	1.231	50.313	24.281
188	3.120	1.239	51.285	25.078
189	3.136	1.254	52.076	25.276
190	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	1.367	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	3.778	1.656	60.935	32.546
214	3.814	1.663	61.307	32.808
215	3.825	1.669	61.666	33.060
216	3.835	1.674	62.148	33.204
217	3.844	1.685	62.532	33.341
218	3.853	1.700	62.546	33.414
219	3.864	1.704	62.559	33.514
220	3.874	1.706	62.570	33.640
221	3.891	1.709	62.846	34.692
222	3.928	1.711	63.097	34.711
223	3.966	1.714	63.150	34.733
224	4.008	1.718	63.150	34.770

225	4.010	1.721	63.150	34.796
226	4.012	1.723	63.150	34.810
227	4.016	1.726	63.150	34.821
228	4.019	1.729	63.150	34.839
229	4.057	1.731	63.150	34.865
230	4.065	1.733	63.150	34.894
231	4.071	1.735	63.150	34.918
232	4.073	1.743	63.150	34.944
233	4.075	1.749	63.150	34.985
234	4.077	1.753	63.153	34.014
235	4.079	1.757	63.159	34.032
236	4.081	1.762	63.173	34.051
237	4.083	1.767	63.193	34.067
238	4.084	1.772	63.214	34.079
239	4.085	1.776	63.233	34.085

(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 21st day of May 1998 by a vote of 7-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board