OFFICE OF AIR QUALITY MANAGEMENT

Control and Prohibition of Air Pollution from Gasoline-fueled Motor Vehicles

Enhanced Inspection and Maintenance Program

Reproposed Amendments:  N.J.A.C. 7:27-15.1, 15.5 and 15.6; 7:27B-5.1, 5.2, 5.10, 5.11 and 5.12

Reproposed Repeals:  N.J.A.C. 7:27B-5.6, 5.8 and 5.9


Authorized By:  Bradley M. Campbell, Commissioner, Department of Environmental Protection.

Authority:  N.J.S.A. 13:1B-3(e), 13:1D-9, 26:2C-8 et seq., specifically 26:2C-8 through 8.5, and 8.11, and 39:8-41 et seq., specifically, 41-58.

Calendar Reference:  See summary below for explanation of exceptions to calendar requirement

DEP Docket Number:  12-02-04/320

Proposal Number:  PRN 2002-189

A public hearing concerning this proposal will be held at 10:00 A.M. on Monday, June 24, 2002 at:

First Floor Public Hearing Room
Department of Environmental Protection
401 E. State Street
Trenton, New Jersey

Submit written comments, identified by the DEP Docket Number given above, by close of business on July 19, 2002 to:
This proposal has been filed with the Office of Administrative Law which may edit it before publishing it in the New Jersey Register. Please refer to the May 20, 2002 New Jersey Register (34 N.J.R. 1811(a)) for the official text of the proposal.

Attn: Stacey P. Roth, Esq.
DEP Docket No. 12-02-04/320
Office of Legal Affairs
New Jersey Department of Environmental Protection
PO Box 402
Trenton, N.J. 08625-0402

Several documents are cited within this notice as references or as documents being incorporated by reference. Copies of these documents may be requested from:

New Jersey Department of Environmental Protection
Public Access Center
401 E. State Street, 1st floor
PO Box 402
Trenton, N.J. 08625

An additional source of documents cited within this notice as documents being incorporated by reference is the website of the United States Environmental Protection Agency (EPA) at: http://www.epa.gov/epahome/rules.html#proposed.

Visit our website at: www.state.nj.us/dep/aqm, where Air Quality Management rules, proposals, adoptions and SIP revisions are available.

The agency proposal follows:

Summary

This notice of proposal is excepted from the rulemaking calendar requirement by having a 60-day comment period, pursuant to N.J.A.C. 1:30-3.3(a)5.

The Department of Environmental Protection (the Department) is reproposing amendments, repeals, and new rules to N.J.A.C. 7:27-15, Control and Prohibition of
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Air Pollution from Gasoline-Fueled Motor Vehicles, and N.J.A.C. 7:27B-5, Air Test Method 5: Testing Procedures for Gasoline-Fueled Motor Vehicles, its rules governing the test procedures and standards for the inspection of gasoline-fueled motor vehicles. By this reproposal, the Department is again proposing portions of its January 22, 2002 proposal of amendments, repeals, and new rules to its enhanced inspection and maintenance (I/M) program rules, as discussed more fully below. That proposal, referred to hereinafter as the January 22, 2002 proposal, was published in the New Jersey Register on that date at 34 N.J.R. 414(a). An electronic version of the January 22, 2002 proposal can be viewed on the Department’s website at [http://www.state.nj.us/dep/afm/curformp.htm](http://www.state.nj.us/dep/afm/curformp.htm). The content of the January 22, 2002 proposal was reflected in a proposed revision to New Jersey’s enhanced I/M program State Implementation Plan (SIP), which was forwarded to the EPA on December 31, 2001. The December 31, 2001 proposed SIP revision also reflected the enhanced I/M program rule changes contained in a recent proposal by the Division of Motor Vehicles (DMV), Department of Transportation (DOT), regarding the DMV’s school bus inspection rules, published in the New Jersey Register on February 19, 2002. (See 34 N.J.R. 829(a).) A public hearing regarding that proposal was held on February 25, 2002. The Department determined not to adopt the January 22, 2002 proposal but instead to repose the rules with changes intended to address comments and concerns raised during the initial public comment period. A summary of the main issues raised during the comment period and at the public hearing for that proposal, along with the changes made in the rules proposed herein to address those issues, is provided later in this Summary.

**Background**

**Procedural History**
New Jersey is required by the Clean Air Act to implement an enhanced inspection and maintenance (I/M) program to assist the State in attaining and maintaining the health-based National Ambient Air Quality Standards (NAAQS) for ozone and carbon monoxide (CO). The NAAQS are set to protect the public health and welfare. On October 2, 1995, the Department adopted new rules and amendments to N.J.A.C. 7:27-15 and 7:27B-4 (the latter subsequently recodified at N.J.A.C. 7:27B-5) that established the necessary test procedures and standards for implementation of an enhanced I/M program for light-duty, gasoline-fueled motor vehicles in New Jersey. (See 27 N.J.R. 3806(a).) The DMV adopted complementary rules which provided for the operational requirements of the enhanced I/M program on that same date. (See 27 N.J.R. 3820(a).) On June 29, 1995, the Department submitted both its and the DMV’s proposals to the EPA as part of an enhanced I/M State Implementation Plan (SIP) revision. A subsequent SIP revision was submitted on March 27, 1996, modifying the enhanced I/M program to take advantage of the greater flexibility offered under the provisions of the National Highway System Designation Act of 1995 (NHS Act), P.L. 104-59.

On May 14, 1997, the EPA granted conditional interim approval to New Jersey’s enhanced I/M SIP. (See 40 C.F.R. 52, 62 Fed. Reg. 26401 (May 14, 1997).) The State subsequently satisfied the conditions of this approval and the EPA granted interim approval of New Jersey’s enhanced I/M SIP. The State submitted a SIP revision to the EPA on August 31, 2001, that included the remaining items needed for the EPA to grant final approval of New Jersey’s enhanced I/M SIP program. (See “The State of New Jersey, Department of Environmental Protection, Enhanced Inspection and Maintenance (I/M) Program for the State of New Jersey, Final National Highway Systems Designation Act (NHSDA) Submittal and Revised
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Performance Standard Modeling, SIP Revision,” August 20, 2001.) On September 11, 2001, the EPA proposed to approve the August 31, 2001 SIP revision and to grant final approval to the State’s overall enhanced I/M SIP. (See 66 Fed. Reg. 47130 (September 11, 2001).) This SIP approval became final on January 22, 2002. (See 67 Fed. Reg. 2811).

Both the Department and the DMV have made modifications to the enhanced I/M program design. These modifications can be found in the New Jersey Register as follows:

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<td>February 19, 2002</td>
<td>34 N.J.R. 829(a)</td>
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As mentioned above, on December 31, 2001 the State forwarded proposed SIP revisions to the EPA that reflected the DMV’s February 19, 2002 proposal and the Department’s January 22, 2002 proposal. This proposed SIP revision also included
a formal request for 1) deferral of the start date for the inclusion of mandatory
On-Board Diagnostic (OBD) inspections into New Jersey's I/M program from January
1, 2002 to January 1, 2003 and 2) approval of a phase-in of the mandatory OBD
inspection portion of New Jersey’s I/M program. The State has provided the EPA
with a proposed SIP revision reflecting the changes to the enhanced I/M program
SIP encompassed in today’s proposal.

Program History

The State of New Jersey implemented its enhanced inspection and
maintenance (I/M) program on December 13, 1999. The enhanced I/M program is
designed to detect gasoline-fueled motor vehicles operating with excessive
emissions under test conditions that represent more realistic driving conditions than
New Jersey’s basic I/M program, which it replaced. In addition, the enhanced I/M
program inspects vehicles to detect excess emissions of nitric oxide (NO), a
pollutant that was not previously measured as part of the basic I/M program, which
only measured emissions of carbon monoxide (CO) and hydrocarbons (HC).
(Hydrocarbons (HCs) are a subset of the volatile organic compound (VOC) category
of pollutants; nitric oxide (NO) is a subset of the NO\textsubscript{x} category of pollutants.)

Over the past two years, New Jersey’s enhanced I/M program has effectively
identified vehicles operating with emissions in excess of the State’s standards. The
State’s data from July 1, 2000 through December 31, 2000 indicates that New
Jersey motorists complied with enhanced I/M program requirements by repairing
these failed vehicles. Those repairs have resulted in overall reductions of 55 percent
for HC, 58 percent for NO\textsubscript{x} and 84 percent for carbon monoxide. (See The State of
New Jersey Department of Environmental Protection, Enhanced Inspection and
New Jersey's current enhanced I/M program rules provide for implementation of the program using the following primary components: one of two enhanced exhaust emissions tailpipe tests (the dynamometer-based ASM5015, or, when not appropriate to the vehicle, the 2,500 RPM test); and three evaporative emissions tests known variously as the purge test, the pressure test, and the fuel cap leak test. The program rules also provide for the introduction of the on-board diagnostic (OBD) inspection for model years (MY) 1996 and newer vehicles, beginning January 1, 2001.

Both of the enhanced I/M tailpipe tests (the ASM5015 and the 2,500 RPM tests) measure the vehicle exhaust of a MY 1981 and newer vehicle weighing no more than 8,500 pounds through insertion of a sample probe into the vehicle's tailpipe while the engine is running. With the exception of low mileage vehicles (that is, a motor vehicle that is driven less than 10,000 miles during a biennial inspection period) and vehicles employing full-time all-wheel drive or non-disengagable traction control, the exhaust emissions from these vehicles are measured using the ASM5015 test while the vehicle is driven on a dynamometer to simulate driving conditions. For the low mileage and all-wheel drive vehicles, the exhaust emissions are measured while the engine is not in gear and the engine speed is increased from idle to around 2,500 revolutions per minute (RPM), using the 2,500 RPM test. (The idle test, which is the basic tailpipe test conducted on older, pre-1981 model year vehicles, and vehicles weighing more than 8,500 pounds, measures emissions while the engine idles.) The State's current enhanced I/M program rules provided for a
phase-in of the "final" emission standards for the ASM5015 test. "Initial" standards, implemented at the inception of the program, were to be replaced with "final" standards on and after January 1, 2002.

As to the evaporative emissions component, the State has not implemented either the purge or the pressure test, both of which are, however, referenced in the current enhanced I/M program rules. The remaining evaporative emissions test, known as the fuel cap leak test, is a fully-implemented component of the enhanced I/M program. This test, which is functionally equivalent to the test of the fuel cap included in the evaporative pressure test, checks for evaporative emissions caused by defective or damaged fuel cap seals.

The final enhanced I/M program component, the on-board diagnostics, or OBD, inspection is not, as such, an exhaust emissions test. Rather, it involves the downloading of information from a computer system "on-board" the vehicle that monitors key sensors on the engine and other vehicle components related to emissions. (Most model year 1996 and newer vehicles sold in the United States come OBD-equipped. At present, these vehicles comprise approximately 50 percent of the State's overall vehicle fleet. This fraction of the overall vehicle population is expected to be closer to 60 percent in 2003 when the mandatory OBD inspections are proposed to begin.) An indicator light on the dashboard (the malfunction indicator light, or MIL) alerts the motorist to potential problems with the vehicle. More detailed information is available to the inspector/technician when the on-board computer is linked to the testing computer and the information-containing codes are downloaded. Thus, this test does not measure actual emissions but rather is designed to identify problems with the vehicle's emissions-related systems generally, before they result in increased emissions and equipment failure.
As is discussed in the January 22, 2002 proposal, implementation of the OBD component of the program had been delayed in New Jersey and elsewhere in the nation. The EPA had concurred in this delay. The EPA’s and the State’s enhanced I/M program rules in the early and mid-1990s provided for the mandatory implementation of the OBD inspection component on and after January 1, 2000. In 1998 the EPA changed that mandatory start date to January 1, 2001. The EPA again delayed the start date for mandatory OBD inspections to January 1, 2002, when it adopted amendments to its enhanced I/M program rules on April 5, 2001 (66 Fed. Reg. 18156). In fact, it was not until June of 2001 that the EPA finalized its guidance on how to implement the OBD portion of an inspection program, a critical aid to states implementing OBD inspections. (See “Performing Onboard Diagnostic System Checks as Part of a Vehicle Inspection and Maintenance Program,” Transportation and Regional Programs Division, Office of Transportation and Air Quality, U.S. Environmental Protection Agency, June 2001.)

The April 5, 2001 amendments to the EPA’s rules most relevant to this rulemaking provide for the following: (1) the start date for the mandatory implementation of OBD inspections by all states was deferred for one year; that is, the mandatory start date is now January 1, 2002, instead of January 1, 2001; (2) states could apply to the EPA for an extension of the January 2002 start date of up to 12 additional months, establishing an alternative start date of no later than January 1, 2003, provided they show just cause that the alternative start date is “the best a state can reasonably do” in terms of implementing OBD inspections into their I/M program; and (3) states can take advantage of a one-time phase-in of the mandatory OBD inspection requirements which would defer for one test cycle the repair requirement for those vehicles that fail an initial OBD inspection but pass a
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subsequent “second chance” initial tailpipe test. During phase-in, the OBD inspection would effectively be used as a screen to help identify vehicles that are clean and for which no additional emissions testing would be required. However, once the vehicle is identified as failing the OBD inspection, it would be given a second-chance tailpipe test to determine if the fault identified by the OBD inspection has reached a point where the vehicle’s current emission performance is adversely affected. In addition, the EPA’s April 5, 2001 rulemaking served to “clarify that I/M programs may (at their discretion) use periodic checks of the OBD system on model year (MY) 1996 and newer OBD-equipped vehicles in lieu of (as opposed to in addition to) existing exhaust and evaporative system purge and fill-neck pressure tests on those same vehicles.” While the amended rules do not mandate substitution of OBD inspections for the enhanced tailpipe tests, the EPA has strongly encouraged states to do so. This represents a significant departure from the EPA’s previous program design which required OBD inspections in addition to tailpipe and evaporative emissions testing on OBD-equipped motor vehicles.

On October 8, 2001, consistent with the options provided by the EPA’s amended rules, the Department’s then-Commissioner, Robert C. Shinn, Jr., sent a letter to the EPA indicating the State’s intent to request a one-year extension of the January 1, 2002 start date and outlining the State’s plan to phase-in the mandatory OBD inspection program. This request was formalized in the proposed SIP revision that was sent to the EPA on December 31, 2001.

In the January 22, 2002 proposal, the Department primarily proposed to modify the framework, procedures and testing schedule by which model year 1996 and newer vehicles would be subject to OBD inspections, including an extension to January 1, 2003 of the start date for mandatory OBD inspections. Other major
changes included the Department’s proposal to streamline and modify the emission standards for the ASM5015 exhaust emissions test. The Department also proposed to remove all references to the evaporative pressure and purge tests while retaining the evaporative fuel cap leak test. In addition, the Department proposed to exempt from dynamometer testing those vehicles that are registered as school buses and that are under the jurisdiction of the DMV’s School Bus Inspection Unit. On a less substantive note, the Department proposed to add a table as an Appendix to N.J.A.C. 7:27-15 that would describe, in reader-friendly format, which exhaust emissions test or OBD inspection is associated with each category of motor vehicle. A fuller explanation of the originally contemplated changes to the enhanced I/M program is set forth in the January 22, 2002 proposal.

The Department fully anticipates that, as automotive design evolves and automotive emission control and monitoring systems improve and become more sophisticated, the design of the State’s I/M program will also evolve. A case in point is the recent announcement by Governor James McGreevey of the intent to pursue the exemption of new motor vehicles from their first biennial inspection cycle so that these vehicles would not have to be tested for emissions for the first four years they are on the road. The Department supports this exemption, but notes that it may require legislative action and further rulemaking by the DMV before this exemption can be effectuated. Consideration of whether this testing exemption would extend to the biennial safety inspections normally paired with emissions inspections, however, remains within the purview of the DOT and the DMV.

Rulemaking History of this Proposal
As is discussed above, on January 22, 2002 the Department published proposed amendments, repeals, and new rules that are the subject of this reproposal. See 34 N.J.R. 414(a). On or about this same date the Department made the proposal available electronically on its Internet website and distributed it to libraries and other locations throughout the State, as well as to neighboring states and the EPA. Notice of the hearing was distributed to over 1,100 interested parties. The official comment period for the January 22, 2002 proposal closed on February 28, 2002.

The Department held a formal public hearing on the January 22, 2002 proposal on February 25, 2002 in Trenton, attended by approximately 70 people. Chris Salmi, the Department’s Bureau of Air Quality Planning Chief, served as Hearing Officer at the hearing. The Hearing Officer made no recommendation. The hearing records are available for inspection in accordance with applicable law by contacting Stacey P. Roth, Esq., Office of Legal Affairs, Department of Environmental Protection, PO Box 402, Trenton, N.J. 08625-0402.

The Department determined not to adopt the rules as proposed on January 22, 2002, in order to modify them in response to concerns and issues raised during the public comment period. Following is a brief discussion of the major issues raised and how the Department has addressed those issues in today’s proposal. Additional changes made in response to comments on the January 22, 2002 proposal are described in the section-by-section summary of the proposed amendments, repeals, and new rules.
Comments on the January 22, 2002 Proposal

Implementation of Mandatory OBD inspections

The EPA commented that, although its enhanced I/M program rules give states the option of phasing-in OBD inspections, they provide that, during the phase-in, a motor vehicle that fails the tailpipe test given as a “second chance” test must be repaired to pass an OBD standard inspection. The EPA expressed concern that the January 22, 2002 proposal did not require repair to an OBD inspection but only to pass a tailpipe test.

In addition, while several commenters advocated some form of dual testing (that is, both OBD inspection and tailpipe testing on the same vehicle), several other commenters expressed concern that the public would react adversely should conflicting test results occur between the OBD inspection and the tailpipe test. They were also concerned that the public would react adversely to the fact that a motor vehicle that failed an OBD inspection would not have to be repaired to pass an OBD inspection on reinspection. Thus, their primary concern was that the public would be confused regarding the OBD inspection and would be desensitized to the importance of early repair of vehicles with activated MILs.

The Department has addressed these concerns in this reproposal by proposing to implement a mandatory OBD inspection component without a "second chance" tailpipe test.

Several commenters expressed concerns regarding the issue of vehicle readiness, particularly with respect to the time and effort required to make a vehicle ready for retest after an OBD repair. The Department recognizes the validity of the
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commenters’ concerns. The Department, however, has decided to adhere to the EPA's readiness requirements for an OBD inspection. That is, a motor vehicle that does not meet the EPA's prescribed readiness requirements would fail the OBD inspection (and thus the I/M test). By incorporating the EPA's readiness criteria, the program will realize the full emission reduction benefits of the OBD inspection.

The Department believes that through an effective public outreach campaign addressing both the general public and the vehicle repair community, the rate of "non-readiness" for an OBD inspection would be much diminished. Information regarding OBD inspections in other states indicates that one of the primary causes of a vehicle arriving at a test center for a retest in a "not ready" condition following an OBD-related repair is insufficient driving of the vehicle following the OBD repair. That is, the vehicle has not been driven through sufficient and varied driving conditions to allow the OBD monitoring systems to reach a "ready" condition. Normally, the required driving conditions can be achieved within one week of normal driving patterns. Alternatively, the facility performing the OBD repair could prepare the vehicle for an OBD retest by driving the vehicle through the manufacturer's prescribed "OBDII driving cycle" either on a dynamometer or on the highway and thereby assure that the vehicle is in a "ready" condition following the repair.

Several commenters also expressed concerns over the effectiveness of an OBD inspection, especially with respect to the detection of evaporative emissions and exhaust NOx emissions. In addition, these commenters were concerned about the possibility of false failures with the OBD inspection.

The EPA has determined that an OBD inspection is at least as effective as traditional tailpipe, purge and pressure tests when it comes to identifying vehicles
in need of repair. This determination by the EPA is applicable to all three exhaust emission pollutants as well as to evaporative emissions. Although the EPA states that the OBD system does not directly monitor the efficiency of the catalytic converter for NO\textsubscript{x} reduction, it does monitor other parameters that can cause high NO\textsubscript{x} emissions, and would indicate the majority of defects that cause high NO\textsubscript{x} emissions.

As regards the potential for OBD inspection “false failures,” because the nature of an OBD inspection differs markedly from that of a traditional tailpipe test the implications of a “false failure” are also quite different for each of these tests. The OBD inspection is primarily a check of the functionality of those key sensors and systems that must function properly to maintain a motor vehicle’s low emissions. In that regard, the OBD system may detect an anomalous output from a sensor resulting in an illumination of the MIL, even when the vehicle's tailpipe emissions are not elevated. Within the context of a traditional tailpipe test, this would be considered a "false failure." However, in the case of an OBD inspection, the MIL illumination could indicate a deteriorating sensor or emission control component and could, therefore, be "predictive" of a future component failure that would result in high tailpipe or evaporative emissions.

Finally, several commenters expressed concerns regarding the OBD inspection of certain vehicle makes and models that have exhibited design-related deficiencies in their OBD systems. The EPA has identified these vehicles and has provided this information to states implementing OBD I/M programs, recommending that these vehicles not be subjected to OBD inspections. Consistent with the EPA’s recommendation, and recognizing that it is not possible to perform a complete OBD inspection on these vehicles, the Department is proposing to require, in place of a
full OBD inspection, an abbreviated version of the OBD inspection that would check only whether the OBD system’s bulbs work and whether a MIL is illuminated. In addition to passing this abbreviated OBD inspection, the motor vehicle would be required to pass the appropriate tailpipe exhaust test. If the motor vehicle fails either the abbreviated OBD inspection or the tailpipe exhaust test it would be required to be repaired to pass the failed test or tests on reinspection.

Evaporative Pressure Test

In the January 22, 2002 proposal, the Department proposed to eliminate the evaporative pressure and purge tests from the existing rules. The Department proposed this after a deliberative process evaluating all aspects of implementing the pressure test within the framework of the existing enhanced I/M program. The Department involved many stakeholders in this deliberative process.

Commenters expressed concerns regarding the substantial loss of environmental benefits attributable to deletion of the pressure test. These commenters also requested information as to how the Department would address these shortfalls. In addition, one commenter stated that the Department's January 2002 proposal understated the emission reduction benefits of the pressure test by not recognizing the disproportionately high contribution of older, pre-1996 vehicles to the overall emissions inventory.

The Department's analysis of the environmental benefits of the evaporative pressure test included a recognition of the contribution of pre-1996 model year vehicles relative to the overall motor vehicle emissions inventory. However, because of operational concerns regarding the impact of the pressure test on inspection throughput rates at the CIFs, inspector safety concerns in a high volume
inspection environment, potential damage to the vehicle's evaporative control hoses due to clamping, and pressure testing equipment cost concerns for PIFs, the Department believes the addition of a pressure test at this time is not advisable.

The Department is replying the deletion of the evaporative pressure and purge tests from its rules. The Department, however, intends to re-model the environmental benefits of the program without the evaporative pressure and purge tests, but including OBD testing. This modeling effort will be part of the State's MOBILE6 SIP revision, required by January 2003. If, after completing this re-modeling exercise, the State can no longer meet the emission reduction goals outlined in its Rate of Progress and Attainment Demonstration Plans, the State will need to address any emission reduction shortfall.

Standards for the ASM Tailpipe Emissions Test

In the January 2002 proposal, the Department proposed a set of revised “interim” standards for the ASM emissions test. These standards were applicable to specific classes of vehicles and were not as stringent as the EPA's originally designed “final” ASM standards, previously adopted by the Department. The Department proposed these standards as replacements for the EPA's final standards out of concern that implementation of these standards would result in unacceptably high false failure rates. These concerns were confirmed by the EPA which consequently formally notified those states using the ASM test not to implement the “final” ASM standards.

In commenting on the January 22, 2002 proposal, the EPA asked the State to reconsider adoption of the Department's proposed “interim” standards in light of the anticipated imminent release of its revised “final” ASM standards. Several other
commenters urged the Department to propose a much more complete and more stringent set of “final” standards for the ASM test instead of the proposed “interim” standards in order for the ASM test to be capable of identifying high-emitting vehicles.

In light of the EPA's announcement that it is finalizing a comprehensive set of revised “final” standards that will apply to all vehicles that are subject to the ASM5015 exhaust emission test, and the concerns expressed by commenters as to the stringency of the “interim” standards, the Department has decided not to adopt the proposed “interim” standards. The Department, therefore, is proposing to repeal, without replacement at this time, the EPA's original set of “final” ASM standards. The Department plans to evaluate the EPA's revised “final” standards when they are released, and, if appropriate, propose those standards for inclusion in the State's I/M program at a later date.

**Additional Comments on the January 22, 2002 Proposal**

The Department received additional comments on the January 22, 2002 proposal that do not relate to the content of the original proposal or this reproposal. As a result, the Department has not addressed these comments as part of the current reproposal, but will retain these comments and may consider them in developing future rulemakings and in making program decisions concerning the State's enhanced I/M program.
Overview of the current reproposal

By this reproposal, the Department is proposing many of the same amendments contained within the January 22, 2002 proposal, with differences as noted below:

**Implementation of On-Board Diagnostic Inspections and Schedule**

Currently, the Department’s rules provide that a motor vehicle inspection under this subchapter includes, as of January 1, 2001, an OBD inspection for all model year 1996 and newer vehicles not otherwise exempt from OBD inspection. However, New Jersey has not implemented this portion of its enhanced I/M program because, as the time for implementation approached, the EPA was still in the process of promulgating amendments to its rules governing the implementation of OBD inspections in state inspection programs.

**Extension of Start Date:** The State has requested from the EPA a one-year extension of the start of mandatory OBD inspections from January 1, 2002 to January 1, 2003. This extension of the start date is critical in New Jersey, particularly given the hybrid nature of its inspection network design. Unlike those states with entirely centralized or entirely decentralized enhanced I/M programs, New Jersey employs an inspection program design that is hybrid in nature; that is, the program includes both centralized test-only inspection facilities (hereinafter referred to as CIFs) and private test-and-repair inspection facilities (hereinafter referred to as PIFs). Although this hybrid design allows for motorist choice concerning where to have a vehicle inspected (and, if necessary, reinspected), it does make software upgrades and programmatic changes more complicated. For one, it requires the modification of two distinct software applications (one for each
type of inspection facility) while assuring compatibility with a common vehicle inspection database (VID).

Furthermore, there are currently five different analyzer systems being used by PIFs, each of which requires system-specific upgrades in order to include OBD inspections. In addition, all central inspection facility equipment/analyzer systems must also be upgraded to accommodate OBD inspections. All of these upgrades must conform with State specifications and pass stringent acceptance testing protocols before they can be installed in the testing facilities. However, given the State’s previous experience coordinating system upgrades with multiple equipment vendors, the State recognized that it would have been unrealistic to expect to test and upgrade all analyzer systems to administer OBD inspections by the January 2002 deadline. Accordingly, the State requested from the EPA a one-year extension of the start date to January 1, 2003 and provided the supporting “good cause” justification as part of its December 31, 2001 proposed SIP revision.

As the Department explained in the January 22, 2002 proposal, even with the one-year extension of the start date for mandatory OBD inspections to January 1, 2003, the Department anticipates that it could take additional time before all private and central inspection facilities will be capable of performing OBD inspections. Integrating OBD inspections into the current enhanced I/M program is a complex and major undertaking, involving hardware and software upgrades, inspector and repair industry training and customer education efforts. New Jersey’s past experience with such major changes to its inspection and maintenance program underscores the need to proceed carefully to protect the integrity of the program and to avoid major disruption to the program’s operation. As a result of this past experience, the
This proposal has been filed with the Office of Administrative Law which may edit it before publishing it in the New Jersey Register. Please refer to the May 20, 2002 New Jersey Register (34 N.J.R. 1811(a)) for the official text of the proposal.

Department is proposing to amend its enhanced I/M program rules to require mandatory OBD inspections beginning June 1, 2003.

In addition, the State will closely monitor the operation of the mandatory OBD inspection component of its enhanced I/M program during the first 60 days of its operation to ensure that continued implementation does not jeopardize the integrity of the enhanced I/M program as a whole.

Phase-In of Mandatory OBD Inspections: This proposal differs from the January 22, 2002 proposal in that the Department is no longer proposing to phase-in the OBD inspection requirements. In the January 22, 2002 proposal the Department had proposed deferring the OBD repair requirement for a motor vehicle that fails an OBD inspection but passes a “second chance” tailpipe test. As is described more fully in the January 22, 2002 proposal, the Department originally envisioned giving the appropriate “second chance” tailpipe test to a vehicle that failed the initial OBD inspection or was deemed “not ready” for the initial OBD inspection. (A vehicle is deemed “not ready” if an OBD scan indicates that it does not meet the EPA’s criteria for “readiness”; that is, the vehicle’s OBD system fails to indicate that a critical number of supported monitors have been set.) Under that proposal, a vehicle that failed the “second chance test” would have been required to be repaired to meet the exhaust emission test standards established for that test, and would have been reinspected using this same exhaust emission test.

The State has decided not to proceed with its “second chance” test program design in response to the written comments submitted by the EPA. The EPA indicated that the State’s proposed phase-in approach was inconsistent with the phase-in option provided by the EPA in that, instead of requiring a vehicle failing the
“second chance” test to be repaired to pass an OBD inspection, New Jersey proposed to require the failing vehicle to be repaired to pass the tailpipe test it had received as the “second chance” test. The Department carefully considered this and other comments relating to “second chance” testing and, after careful deliberation, determined that implementation of the EPA’s original OBD inspection component design without “second chance” testing would impose less of an administrative burden on the State than implementation of a “phase-in” OBD inspection program that still required the motor vehicle to be repaired to pass an OBD inspection on reinspection. Accordingly, the Department is hereby proposing an alternate OBD inspection program design that does not include “second chance” testing. All vehicles that fail an OBD inspection would be required to be repaired to pass an OBD reinspection.

Continuation of “Initial” Standards for the ASM5015 Exhaust Emission Test

Currently, N.J.A.C. 7:27-15.6(b)3, Table 3 provides for the use of “initial” ASM5015 exhaust emission test standards through December 31, 2001, and for the implementation of “final” ASM5015 exhaust emission test standards on January 1, 2002, for gasoline-fueled motor vehicles, model years 1981 and newer. (More precisely, Table 3 sets forth reference numbers directing the reader to the applicable emissions standards set forth at N.J.A.C. 7:27-15.6(b)4, Table 5.) These standards were developed by the EPA and made available to states implementing enhanced I/M programs in a technical guidance document, EPA-AA-RSPD-I/M-96-2, entitled “Acceleration Simulation Mode Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications,” July 1996.
The Department is now proposing to repeal these “final” ASM5015 standards, as it had in the January 22, 2002 proposal, so that they do not go into effect in 2002. The Department’s decision not to implement these “final” standards is based in part on an indication from the EPA that implementation of these “final” standards could result in unacceptably high rates of false failures; that is, an unacceptably high number of vehicles would fail the test even though they meet the applicable Federal emissions certification standards. The Department concurs in this assessment, especially in the case of older vehicles. The EPA’s position on the implementation of ASM5015 “final” standards was further clarified in a letter dated April 12, 2001, from Margo Tsirigotis Oge, Director of the EPA’s Office of Transportation and Air Quality to Betty L. Serian, Deputy Secretary of the Safety Administration for the Pennsylvania Department of Transportation. In that letter, Director Oge strongly advised Pennsylvania not to implement the existing ASM “final” standards until the EPA had completed its research regarding an alternative set of ASM “final” standards and had established guidance regarding state implementation of the ASM “final” standards. This letter appears to provide clear guidance to states that include the ASM5015 exhaust emission test as part of their enhanced I/M program, such as New Jersey, on how to address implementation of the existing “final” standards. Accordingly, the Department proposed in the January 22, 2002 proposal to amend its enhanced I/M program rules so that the existing “final” ASM5015 standards would not replace the “initial” ASM5015 standards in 2002. In addition, the Department had proposed to replace certain of the ASM5015 standards now in effect with new “interim” standards, effective January 1, 2003, that would have been more appropriate to the vehicles to which they would have applied.
In deciding to replace the “final” ASM standards with continuing “initial” and new “interim” standards, the Department had not foreclosed the possibility that it might, at some future date, implement new “final” standards for those vehicles subject to the ASM5015 exhaust emission test. The EPA has indicated that it is nearing finalization of these new standards. In fact, in its comments on the January 22, 2002 proposal, the EPA repeated its concerns regarding these “final” standards but encouraged the State not to adopt the proposed substitute standards because the EPA would be releasing substitute “final” standards in the near future. Since, however, these standards are not yet available and since the Department agrees with the EPA that the currently promulgated final standards should not be implemented, the Department has determined, for the sake of simplicity, to propose removing the end dates from the tables containing the “initial” standards and deleting the tables containing the “final” standards, in their entirety. This would have the effect of continuing the “initial” standards until such time as appropriate “final” standards become available and are adopted, pursuant to the New Jersey Administrative Procedure Act. Also, in the interest of clarity, and in contrast to its January 22, 2002 proposal, the Department is not proposing “interim” standards.

Removal of References to the Evaporative Pressure and Purge Tests

As it did in the January 22, 2002 proposal, the Department is rep roposing to remove from its enhanced I/M program rules all references to two evaporative emission control tests, known as the evaporative purge and the evaporative pressure tests. The first of these, the evaporative purge test, determines if a vehicle’s evaporative control system is properly disposing of, or “purging,” VOC emissions from the vehicle’s evaporative storage canister. The Department had determined in the initial planning stages of the enhanced I/M program design to delay
implementation of an evaporative purge test based on findings by the EPA that the original procedures developed for purge testing were impractical for centralized testing environments. Accordingly, the Department had saved a place in its rules for these provisions by reserving them, and made a commitment that, when and if appropriate test procedures were developed for use by the states, the Department would propose to modify its rules to include these procedures and would implement such a purge test. Although the EPA had resolved to develop alternative procedures which would allow for purge testing in centralized environments, it never finalized any new purge testing procedures. In fact, the EPA points out in the introduction to the April 2000 version of the "IM240 & Evap Technical Guidance" that changes to the August 1998 version include the removal of all references to the EPA evaporative emission purge test. Furthermore, the latest version of the EPA’s mobile model, MOBILE6, (which states must use, when finalized by the EPA, to quantify the emission reduction benefits of the enhanced I/M program as well as other mobile source control strategies) no longer provides credit for the implementation of purge testing. By eliminating the purge test from the list of enhanced I/M program tests for which states can claim credit, the EPA appears to be implying that it is no longer pursuing the development of an alternative purge test for implementation in an enhanced I/M program. Finally, as discussed below, the OBD system on MY 1996 and newer vehicles functions in a way that would achieve the emission reduction benefits of both evaporative purge and pressure testing when motorists make the repairs indicated by their vehicles’ OBD systems. For these reasons, the Department is now reproposing, as it did on January 22, 2002, to remove all reserved provisions and related references to an evaporative purge test.
The second evaporative test referenced by the Department’s rules at N.J.A.C. 7:27-15.5(f)4 is the pressure test. This test is designed to pressurize the entire fuel system and then check for leaks in the system by monitoring the pressure decay over time. Although the Department included procedures for the performance of this test in its enhanced I/M program rules, the State decided to delay implementation of this portion of its enhanced I/M program due to initial start-up problems experienced upon implementation of the program and contractual issues between the PIFs and equipment manufacturers regarding the inclusion of the pressure test equipment within the scope of the original sales agreement.

After these initial start-up problems were corrected, the State considered the addition of an evaporative pressure test to the overall enhanced I/M program. The State conducted an evaluation of all aspects of implementing the evaporative pressure test within the context of the current I/M program. Following the evaluation, the Department concluded that, although it would be technically feasible to add the evaporative pressure test to the inspection process, there remained several issues of concern. These included the impact of the test on inspection throughput rates at the CIFs, concerns for inspector safety in a high volume inspection lane environment, the potential for damaging vehicle evaporative control hoses when clamping and the potential additional costs for PIFs to acquire the testing equipment. In consideration of the above, the State determined that it was no longer advisable to integrate the evaporative pressure test into its enhanced I/M program. As a result, the Department is reproposing to modify its rules to remove this test from the enhanced I/M program. The State will, however, retain the fuel cap leak test, which is currently administered as part of the State’s enhanced I/M program, for those motor vehicles originally equipped with a sealed fuel filler cap. The EPA has
determined that the fuel cap leak inspection accounts for 40 percent of the full evaporative pressure test benefit. (See 40 C.F.R. 52, 62 Fed. Reg. 26402 (May 14, 1997).)

**School Bus Exemption**

As it did in the January 22, 2002 proposal, the Department is reproposing rule amendments that would exempt from ASM5015 testing those non-OBD-equipped motor vehicles that are registered as school buses and subject to inspection by the DMV’s School Bus Inspection Unit. This is consistent with recent revisions to the DMV’s enhanced I/M rules which are part of a proposed revision to the State’s enhanced I/M SIP. As part of its newly adopted regulatory amendments at N.J.A.C. 13:20-7.2, Inspection of motor vehicles; test frequency; exempt vehicles, the DMV, with the concurrence of the Department, added to the list of vehicles exempt from the inspection requirements of the DMV’s enhanced I/M program rules at N.J.A.C. 13:20 any gasoline-fueled vehicle registered as a school bus and subject to inspection by the DMV’s School Bus Inspection Unit in accordance with N.J.S.A. 39:3B-18 et seq. (33 N.J.R. 3651(a), October 15, 2001). This would include certain light-duty gasoline-fueled vehicles, such as vans and sport utility vehicles, that are registered as school buses and used by schools to transport students. Prior to this amendment by the DMV, these particular vehicles, unlike their heavy-duty school bus counterparts, were required, under the DMV’s and the Department’s enhanced I/M program rules, to be inspected at a PIF or a CIF, where (if they were model year 1981 or newer and not otherwise exempt from ASM testing) they would have been subjected to the dynamometer-based ASM5015 exhaust emissions test biennially, that is, once every two years. (If they were OBD-equipped and eligible they would have been subject to OBD inspections with the implementation of the mandatory
OBD inspection component of the enhanced I/M program.) The DMV’s new rules provide, instead, that inspection of these school buses will be pursuant to the provisions of the DMV’s school bus rules at N.J.A.C. 13:20-30. Accordingly, like all other school buses, they will be inspected on site, twice a year, and subjected to the same safety inspections that all other vehicles registered as school buses must pass. As these on-site inspections do not include dynamometer testing, these school buses will be tested using the 2,500 RPM test, which is the enhanced tailpipe test that serves as an alternative to the ASM5015 in the enhanced I/M program for low mileage vehicles or vehicles where dynamometer testing would not be appropriate, such as all-wheel drive vehicles. The State’s June 9, 2001 proposed SIP revision reflecting this rulemaking by the DMV explains the implications of this exemption to New Jersey’s enhanced I/M SIP. In brief, although the use of the 2,500 RPM test will not yield NO$_x$ emission reduction benefits, there are volatile organic compound (VOC) reduction benefits to be gained by performing this test four times as often as it would have otherwise been performed had these vehicles been subjected to testing under the enhanced I/M program. (See “The State of New Jersey Department of Environmental Protection, Enhanced Inspection and Maintenance (I/M) Program for the State of New Jersey, Amendments to the New Jersey Division of Motor Vehicles’ Enhanced Inspection and Maintenance (I/M) Rules, Proposed SIP Revision,” June 9, 2001.) This document can also be viewed at the Department’s website at http://www.state.nj.us/dep/baqp/sip/dmvsip.htm. This proposal would clarify, however, that OBD-equipped gasoline-fueled school buses would be required to pass an on-site OBD inspection once mandatory OBD inspections are implemented.
As a follow up to the amendments to its enhanced I/M program rules regarding school buses, the DMV has also proposed amendments to its school bus rules at N.J.A.C. 13:20-30.13(b), which, if adopted, would reflect the requirement that all school buses, including those specifically exempted from the enhanced I/M inspection requirements, meet the Department’s emissions standards and be inspected for emissions biannually (that is, twice a year), not with an ASM5015 test, but using a 2,500 RPM test (or, in the case of heavier vehicles, an idle test). (See 34 N.J.R. 829(a), February 19, 2002.)
A more detailed explanation of the proposed amendments to N.J.A.C. 7:27-15 and 7:27B-5 follows:

**N.J.A.C. 7:27-15.1 Definitions**

The Department is proposing to add a definition for the term “data link connector” or “DLC” which is used in the proposed new rule at N.J.A.C. 7:27-15.5(m). The Department is also reproposing to amend the definition of the term "motor vehicle emission testing equipment" by deleting the word “emission” to avoid any implication that the term does not include OBD inspection equipment as well as emission testing equipment. The proposed amendments would also remove references to equipment used in the evaporative pressure and purge tests that the Department is proposing to remove from the enhanced I/M program and would add a reference to on-board diagnostic scanners and analyzers and fuel cap leak testers. Likewise, the reference to “motor vehicle emission testing equipment” in the definition would read “motor vehicle testing equipment.” In addition, a reference to N.J.A.C. 7:27B would be changed to N.J.A.C. 7:27B-5, for greater clarity.

The Department is proposing to add a definition of the term “OBD-eligible” which is used at N.J.A.C. 7:27-15.5(n) to describe a motor vehicle that is capable of receiving an OBD inspection as determined by the Department in accordance with criteria established at N.J.A.C. 7:27-15.5(m).

Finally, the Department is also proposing to add a definition of the term “on-board diagnostics” or “OBD,” which is used in N.J.A.C. 7:27-15.
N.J.A.C. 7:27-15.5  Motor vehicle inspections

The Department is reproposing amendments to N.J.A.C. 7:27-15.5(b), (c), (d), (e) and (f) identical to those it proposed on January 22, 2002, as described below:

The Department is proposing to amend N.J.A.C. 7:27-15.5(b), which describes the frequency of inspections, to reflect that motor vehicles subject to the school bus inspection program will be required to receive an initial inspection semi-annually. This is a different inspection frequency schedule than the biennial schedule established for all other vehicles subject to inspections and reflected at N.J.A.C. 7:27-15.5(b).

The Department is proposing to amend N.J.A.C. 7:27-15.5(c), which describes where inspections will be conducted, to reflect that a motor vehicle that is subject to the school bus inspection program will be inspected at the premise or place of business of the vehicle’s operator.

The Department is proposing to amend N.J.A.C. 7:27-15.5(d)1 to refer to an “inspection or reinspection” instead of an “emission inspection” to clarify that the inspection whose requirements are set forth at N.J.A.C. 7:27-15.5(f) is not limited to emission inspections, but encompasses OBD inspections and reinspections conducted after failure of an initial inspection.

The Department is proposing to remove the phrase “other than proper tightening of the gas cap” from N.J.A.C. 7:27-15.5(e)1, since this exception to allow the tightening of the vehicle’s gas cap was only relevant to the evaporative pressure and purge tests, which are not being conducted as part of the enhanced I/M program and references to which this proposed rulemaking would remove.
The Department is proposing to amend N.J.A.C. 7:27-15.5(f) as follows:

- Add a reference to OBD inspections at N.J.A.C. 7:27-15.5(f)2;

- Change a reference in N.J.A.C. 7:27-15.5(f)3 from N.J.A.C. 7:27B-5.7 to 5.6, and a reference in N.J.A.C. 7:27-15.5(f)6 from N.J.A.C. 7:27B-5.11 to 5.8 to reflect the recodification of N.J.A.C. 7:27B-5.7 and 5.11, respectively;

- Delete N.J.A.C. 7:27-15.5(f)4 and 5, which refer to the evaporative pressure test and reserve a place for a reference to the evaporative purge test, respectively. Since the Department is proposing to remove the pressure and purge tests from the enhanced I/M program, it is also proposing to remove all references in this subchapter and in N.J.A.C. 7:27B-5 to these tests;

- Recodify N.J.A.C. 7:27-15.5(f)6 as (f)4 and N.J.A.C. 7:27-15.5(f)8 as (f)5;

- Remove language referring to the evaporative pressure test from N.J.A.C. 7:27-15.5(f)6;

- Substitute the term "motor vehicle testing equipment" for "motor vehicle emission testing equipment" in N.J.A.C. 7:27-15.5(f)2 and 4, as that term now encompasses equipment, such as the OBD inspection equipment, that does not test emissions as such; and

- Delete N.J.A.C. 7:27-15.5(f)7, since the proposal would relocate the reference to OBD inspections to N.J.A.C. 7:27-15.5(f)2.

At N.J.A.C. 7:27-15.5(g), the Department is proposing, as is did on January 22, 2002, to add a reference to OBD inspections, to clarify that the choice of test covered by this subsection includes the OBD inspection as well as the various

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exhaust emission tests. In addition, the section is now structured so that the presumption is that, on and after June 1, 2003 all OBD-equipped and eligible motor vehicles would receive an OBD inspection. In addition, the Department proposes, as it did in the January 22, 2002 proposal, to restructure N.J.A.C. 7:27-15.5(g) so that each paragraph refers to a different exhaust test for those motor vehicles not receiving an OBD inspection: N.J.A.C. 7:27-15.5(g)1 would refer to the idle test; N.J.A.C. 7:27-15.5(g)2 would refer to the 2,500 RPM test; and N.J.A.C. 7:27-15.5(g)3 would refer to the ASM5015 test. The proposal would also provide at N.J.A.C. 7:27-15.5(g)2v that the 2,500 RPM test would be conducted where a gasoline-fueled motor vehicle is subject to inspection as part of the school bus inspection program (and otherwise would have received an ASM5015 test).

The following table highlights the provisions of N.J.A.C. 7:27-15.5(g) to show generally which exhaust emissions test or OBD inspection would be administered to each category of vehicle, and would be provided as a reference at a new Appendix to N.J.A.C. 7:27-15:

<table>
<thead>
<tr>
<th>Test/model year</th>
<th>1980 and older</th>
<th>1981 - 1995</th>
<th>1996 and newer*</th>
</tr>
</thead>
<tbody>
<tr>
<td>idle</td>
<td>all</td>
<td>GVWR &gt; 8500</td>
<td>GVWR &gt; 8500</td>
</tr>
<tr>
<td>2,500 RPM</td>
<td>-</td>
<td>all-wheel drive, low mileage, etc. school bus</td>
<td>all-wheel drive, low mileage, etc. school bus</td>
</tr>
<tr>
<td>ASM5015</td>
<td>-</td>
<td>all others not covered above</td>
<td>all others not covered above</td>
</tr>
<tr>
<td>OBD (after 6/1/2003)</td>
<td>-</td>
<td>-</td>
<td>all OBD-equipped and eligible</td>
</tr>
</tbody>
</table>

*Note: On and after June 1, 2003, an OBD-equipped and eligible motor vehicle will receive an OBD inspection.
The Department is reproposing amendments to N.J.A.C. 7:27-15.5(h), (i) and (l), identical to those proposed on January 22, 2002, as described below:

The Department is proposing minor changes to N.J.A.C. 7:27-15.5(h) to reference DMV’s rules and reflect that the time within which a vehicle must be reinspected is not 30 days, as the rule currently provides, but rather can range, depending upon the reasons for the failure and the timing of the initial inspection, from 48 hours to up to 61 days, as provided by the DMV’s rules at N.J.A.C. 13:20-7.5, 7.6(a) or 43.14(g). The other proposed change is to N.J.A.C. 7:27-15.5(h)1, to add a reference to reinspection requirements to clarify that the operation of a motor vehicle that failed an initial inspection (and was not issued a waiver) is prohibited unless it meets, by the DMV deadline, all the requirements of the reinspection, as well as the inspection.

At N.J.A.C. 7:27-15.5(i), where the tests and inspections that may be conducted during an on-road inspection are listed, the Department is proposing to make the following changes:

- Change the reference in N.J.A.C. 7:27-15.5(i)2 from “motor vehicle emission testing equipment” to “motor vehicle testing equipment” to consistently use the more inclusive term in this subchapter;

- Delete N.J.A.C. 7:27-15.5(i)4, to reflect the removal of the evaporative pressure test from the enhanced I/M program;

- Add new paragraphs N.J.A.C. 7:27-15.5(i)3, 4, 6 and 7 to reflect the inclusion of the 2,500 RPM test, the ASM5015 test, the fuel cap leak test and
the OBD inspection, respectively, in the list of tests and inspections that may 
be conducted during an on-road inspection;

- Recodify N.J.A.C. 7:27-15.5(i)3 and (i)5 as N.J.A.C. 7:27-15.5(i)5 and 8, 
respectively; and

- Change a reference in the new N.J.A.C. 7:27-15.5(i)5 to N.J.A.C. 7:27B-5.7 
to N.J.A.C. 7:27B-5.6, to reflect proposed changes in N.J.A.C. 7:27B-5.

In the January 22, 2002 proposal, the Department had proposed to delete 
N.J.A.C. 7:27-15.5(l), which contains provisions that serve to advise the reader of 
the DMV’s program evaluation test. On reconsideration, the Department is no longer 
proposing to delete these provisions. While this test is not used in determining 
whether a motor vehicle has passed or failed an inspection under this subchapter, 
retaining these provisions continues to put the public on notice that some members 
will receive this test in addition to their regular inspection.

At N.J.A.C. 7:27-15.5(m) the Department is proposing that all OBD-equipped 
motor vehicles will be presumed to be eligible for OBD inspections unless they meet 
certain enumerated criteria designed to identify those motor vehicles for which such 
OBD inspections would not be technologically or functionally feasible. The 
Department proposes to maintain a list of those model years and makes of OBD-
equipped motor vehicles that are not OBD-eligible and proposes at N.J.A.C. 7:27-
15.5(n) to make such list readily available to the public.

N.J.A.C. 7:27-15.6 Motor vehicle inspection standards

At N.J.A.C. 7:27-15.6(b), Table 3 currently provides a series of “initial” 
standards for the ASM5015 test, effective through December 31, 2001, for light-duty
gasoline-fueled motor vehicles (LDGVs), and light-duty gasoline-fueled trucks (LDGT1s and LDGT2s). It also reserves such “initial” standards for LDGVs and LDGTs powered by a fuel other than gasoline. The “initial” standards subtables are followed in the current rule by a series of “final” standards subtables for the ASM5015 test, effective January 1, 2002, for LDGVs and LDGTs. Table 3 also reserves such “final” standards for LDGVs and LDGTs powered by a fuel other than gasoline.

The Department is proposing to amend Table 3 to reflect the continuation of the “initial” standards for the ASM5015 test for all LDGVs and LDGTs by eliminating the end date for these standards in the “initial” standards subtables and by deleting all the “final” standards subtables. This would also serve to continue as “reserved” the ASM5015 standards for LDGVs and LDGTs powered by a fuel other than gasoline as these standards are still not available.

This departs somewhat from the January 22, 2002 proposal in that the Department initially had proposed to substitute “interim” standards for some of the “final” standards for the 1994 and newer Tier 1 LDGT1s and LDGT2s. The Department decided not to propose these “interim” standards in response to the comments submitted by the EPA requesting that the State not implement these standards. In its comments, the EPA indicated that it is finalizing for release in the near future a comprehensive set of revised final standards that would apply to all vehicles that are subject to the ASM15015. The EPA indicated that it is selecting these standards to minimize the number of false failures that would have resulted from implementation of the EPA’s original “final” standards without any loss of emission reduction credit for the enhanced I/M program.
The Department is also reproposing, as it did in the January 22, 2002 proposal, to delete N.J.A.C. 7:27-15.6(b)4 and Table 4, Exhaust Emission Standards for the IM240 Test, to reflect the fact that the IM240 test is not a required test in the enhanced I/M program. The enhanced I/M program rules have contained provisions relating to the IM240 emissions test because private inspection facilities had the option of using this test in the enhanced I/M program. In addition, the State uses this test procedure, not as the basis of passing or failing vehicles as part of the inspection, but to collect data on the effectiveness of the program. This function is described more fully in the current rules at N.J.A.C. 7:27-15.5(l), which the Department is also reproposing to delete, as described below. Accordingly, the Department also reproposes to renumber Table 5 as Table 4.

The Department is reproposing to correct a reference in N.J.A.C. 7:27-15.6(c) from “N.J.A.C. 7:27B-5.7, 5.8, 5.9, 5.10 and 5.11” to “N.J.A.C. 7:27B-5.6,” which is the correct citation for the emission control apparatus inspection test procedure.

The Department is also reproposing a number of non-substantive changes to N.J.A.C. 7:27-15.6 identical to those proposed January 22, 2002, as follows:

- The rule text at N.J.A.C. 7:27-15.6(b)3 would be moved so that Tables 1, 2 and 3 would follow immediately after N.J.A.C. 7:27-15.6(b)1, 2 and 3. Table 5, which would be renumbered as Table 4 and which is used only in connection with Table 3, would follow Table 3;

- At N.J.A.C. 7:27-15.6(d), the text would be simplified so that a reference in subsection (d) to “N.J.A.C. 7:27B-5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10 and 5.11” would be rewritten as “N.J.A.C. 7:27B-5.3 through 5.8, inclusive”;
- At N.J.A.C. 7:27-15.6(e) and (f), the reference to “Tables 1, 2, 3 and 4” would be changed to “Tables 1, 2 and 3” to reflect the deletion of Table 4. Also at N.J.A.C. 7:27-15.6(f), a reference to the evaporative pressure and purge tests would be deleted.

**N.J.A.C. 7:27-15 Appendix**

As discussed above, the Department is proposing to add an Appendix to N.J.A.C. 7:27-15 that would contain a table highlighting the provisions of N.J.A.C. 7:27-15.5(g) to show generally which exhaust emissions tests or OBD inspection would be administered to each category of vehicle in an easy-to-follow graphical representation.

**N.J.A.C. 7:27B-5.1 Definitions**

As it proposes to do in the definitions section of N.J.A.C. 7:27-15, the Department is reproposing to amend the definition of the term "motor vehicle emission testing equipment" by deleting the word “emission” to avoid any implication that the term does not include OBD inspection equipment as well as emission testing equipment. The proposed amendments would also remove references to equipment used in the evaporative pressure and purge tests that the Department is proposing to remove from the enhanced I/M program and would add a reference to on-board diagnostic scanners and analyzers and fuel cap leak testers. Likewise, the reference to "motor vehicle emission testing equipment" in the definition would read “motor vehicle testing equipment.” In addition, a reference to N.J.A.C. 7:27B would be changed to N.J.A.C. 7:27B-5, for greater clarity.
The Department is also reproposing to add definitions for a number of terms that are used in the proposed new rule at N.J.A.C. 7:27B-5.7(a). These are as follows: “data link connector” or “DLC”; “Key On Engine Off” or “KOEO”; “Key On Engine Running” or “KOER”; “malfunction indicator light” or “MIL”; “OBD-eligible”; “on-board diagnostics” or “OBD”; “readiness”; and “readiness monitors.”

N.J.A.C. 7:27B-5.2 General instructions for all tests

The Department is reproposing amendments to N.J.A.C. 7:27B-5.2(a), (b) and (c) identical to those it proposed on January 22, 2002, as described below:

At N.J.A.C. 7:27B-5.2(a), the Department is proposing to simplify the text so that a reference to “N.J.A.C. 7:27B-5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10 and 5.11” would be rewritten as “N.J.A.C. 7:27B-5.3 through 5.8, inclusive.”

At N.J.A.C. 7:27B-5.2(b), the Department is proposing a stylistic change in wording, as well as a change in the regulatory reference from N.J.A.C. 7:27B-5.12 to N.J.A.C. 7:27B-5.9 reflecting the recodification of that subsection.

At N.J.A.C. 7:27B-5.2(c), the Department is proposing to substitute the term “motor vehicle testing equipment” for “motor vehicle emission testing equipment” by deleting the word “emission” so that this term also applies to equipment used in OBD inspections. The Department also proposes to amend N.J.A.C. 7:27B-5.2(c)1 to replace a general reference to specifications with a specific reference to the Department’s requirements at N.J.A.C. 7:27B-5.9.
N.J.A.C. 7:27B-5.6 Procedures for the IM240 test

The Department is reposing to repeal this section, since the IM240 emissions test is not a required test in New Jersey's enhanced I/M program; that is, this test is performed only to evaluate the effectiveness of the program and the results do not form the basis for passing or failing a vehicle.

N.J.A.C. 7:27B-5.7 Emission control apparatus examination procedure

The Department is reposing to recodify this section as N.J.A.C. 7:27B-5.6 to reflect the proposed repeal of N.J.A.C. 7:27B-5.6.

N.J.A.C. 7:27B-5.8 Procedures for the evaporative pressure test

The Department is reposing to repeal this section, as it is removing the requirement for this test and any references thereto from the enhanced I/M program rules.

N.J.A.C. 7:27B-5.9 (Reserved)

The Department is reposing to repeal this section, which had been reserved for the procedures to be used in conducting the evaporative purge test.

N.J.A.C. 7:27B-5.10 Procedures for the on-board diagnostics inspection

The Department is reposing to recodify this section as N.J.A.C. 7:27B-5.7 to reflect the proposed repeal of N.J.A.C. 7:27B-5.6, 5.8 and 5.9. The Department is also reposing to replace the current reference to the EPA's OBD inspection procedures set forth at 40 C.F.R. 85.2222 with a description of how the inspection is conducted, including an abbreviated explanation of how the OBD software actually
Responds to the information being downloaded from the motor vehicle's on-board computer. As the Department proposes to explain in N.J.A.C. 7:27B-5.7(b), the on-board diagnostics inspection procedure is largely a process whereby the motor vehicle testing equipment and the motor vehicle on-board computer interface and exchange information. As such, it would be neither meaningful nor helpful to the reader to include explicit technical details in the description of the OBD inspection procedure. Instead, the Department is proposing a brief, simplified description of the OBD inspection procedure at N.J.A.C. 7:27B-5.7. This proposed description differs somewhat from what was proposed on January 22, 2002, in that it no longer reflects “second chance” testing, and has been expanded to clarify further under what circumstances the analyzer would indicate that the vehicle had passed or failed the OBD inspection. In addition, the Department is proposing at N.J.A.C. 7:27B-5.7(a)11 to add reinspection compliance requirements for a motor vehicle that fails an OBD inspection for a catalyst monitor and, on reinspection, exhibits a not-ready code for the catalyst monitor. The Department proposes to require such a motor vehicle to pass both an OBD reinspection and a tailpipe exhaust test.

At N.J.A.C. 7:27B-5.7(c), the Department is also proposing to require, for non-OBD-eligible motor vehicles, a bulb function and MIL illumination check in addition to the appropriate tailpipe exhaust test.

The Department has prepared a more detailed flowchart, which reflects the logic flow of pass and fail determinations within the procedure. In the January 22, 2002 proposal, the Department had proposed to add this flowchart at N.J.A.C. 7:27B-Appendix 8, but on reconsideration has determined to instead make this available upon request as it is merely illustrative and not regulatory in nature. Additional technical details are set forth in the Department’s OBD equipment
specifications. The flow chart, and an electronic copy of the equipment specification can be obtained by contacting the Department’s Bureau of Transportation Control at (609) 530-4035.

N.J.A.C. 7:27B-5.11 Procedures for the fuel cap leak test

The Department is reproposing amendments to N.J.A.C. 7:27B-5.11 identical to those it proposed on January 22, 2002, as described below:

The Department is proposing to recodify this section as N.J.A.C. 7:27B-5.8 to reflect the proposed repeal of N.J.A.C. 7:27B-5.6, 5.8 and 5.9. In addition, recodification of N.J.A.C. 7:27B-5.5(f)6 to N.J.A.C. 7:27B-5.5(f)4 requires a correction to the reference to that paragraph in the provisions that would be recodified as N.J.A.C. 7:27B-5.8(a). The Department is also proposing, in the provisions that would be recodified as N.J.A.C. 7:27B-5.8(a)2, to update the reference to the EPA technical guidance document entitled “IM240 & Evap Technical Guidance” to EPA 420-R-00-007. Reference to this updated guidance document, dated April 2000, is not a substantive change in that it does not contain changes to the description of the fuel cap leak test. Finally, the Department is removing text from the provisions proposed for recodification at N.J.A.C. 7:27B-5.8(a)2 that indicates that the Department has filed a copy of this EPA technical guidance document with the Office of Administrative Law as there is no longer any such filing requirement.

N.J.A.C. 7:27B-5.12 Specifications for motor vehicle testing equipment for use in the New Jersey Enhanced Inspection and Maintenance Program

The Department is reproposing amendments to N.J.A.C. 7:27B-5.12 identical to those it proposed on January 22, 2002, as described below:
The Department is proposing to recodify this section as N.J.A.C. 7:27B-5.9 to reflect the proposed repeal of N.J.A.C. 7:27B-5.6, 5.8 and 5.9 and to delete the word “emissions” from the heading of the section. In addition, the Department is proposing the following changes:

- To remove text from the provisions proposed for recodification at N.J.A.C. 7:27B-5.9(b)2 and (c)2 that indicates that the Department has filed a copy of the referenced EPA technical guidance documents with the Office of Administrative Law as there is no longer any such filing requirement;

- To delete the provisions at N.J.A.C. 7:27B-5.12(c) as they relate to the equipment to be used in performing the IM240 test. As mentioned above, the Department is proposing to delete all references to this test because it is not used to determine whether a motor vehicle passes or fails an enhanced I/M inspection;

- To recodify the provisions of N.J.A.C. 7:27B-5.12(d) and (e) as N.J.A.C. 7:27B-5.9(c) and (d), respectively, to reflect the deletion of N.J.A.C. 7:27B-5.12(c); and

- To remove the reference at N.J.A.C. 7:27B-5.12(d) (currently (e)) to the evaporative pressure test consistent with the proposed removal of all references to this test in the enhanced I/M program rules.

In addition, the Department proposes to update, in the provisions that would be recodified as N.J.A.C. 7:27B-5.9(c)2, the reference to the EPA technical guidance document entitled “IM240 & Evap Technical Guidance” to EPA 420-R-00-007.
Reference to this updated guidance document, dated April 2000, is not a substantive change in that it does not contain changes to the description of the fuel cap leak test.

**Social Impact**

The Department is reproposing these amendments, repeals and new rules to update and modify the design of the State’s enhanced I/M program to improve its overall effectiveness and otherwise to comply with EPA mandates. Since the enhanced I/M program provides New Jersey’s residents with cleaner air and thus a healthier environment, the proposed improvements to the program would have a positive social impact.

The enhanced I/M program is designed to aid the State in attaining and maintaining the health-based NAAQS for ozone and carbon monoxide by reducing the in-use emissions of air contaminants from gasoline-fueled motor vehicles. Motor vehicle emissions contain VOCs and oxides of nitrogen (NO\textsubscript{x}) which, in the presence of sunlight, react with other compounds in the ambient air to form ozone and other oxidants harmful to public health. Motor vehicles are also significant contributors of carbon monoxide, which is also harmful to public health. Another health benefit, not directly related to the ozone and carbon monoxide NAAQS, is the reduction of air toxics contributed by motor vehicles. Air toxics pose a serious health hazard in this State.

Ozone (O\textsubscript{3}) continues to be New Jersey’s most pervasive air quality problem. Although the ozone found in the earth’s upper atmosphere (stratosphere) forms a layer that protects us from the sun’s ultraviolet radiation, the ozone formed near the earth’s surface (troposphere), hereafter referred to as ground-level ozone, is
breathed by or comes in contact with people, animals, crops and other vegetation, and can cause a variety of health and welfare effects.

As it forms, ground-level ozone and its precursors, especially NO\textsubscript{x}, can be transported by the wind, resulting in high ozone levels in areas downwind of the original pollution source. The combination of higher summer temperatures, sunlight, local emissions, and atmospheric transport conditions contribute to a summertime elevated peak in ozone concentrations. Unlike primary pollutants such as sulfur dioxide and lead, which are emitted directly and can be controlled at their source, ozone precursors are emitted from many different sources and from various geographic locations. This makes reducing ozone concentrations quite challenging. As such, controls on all potential precursor sources are important in mitigating the ozone problem. In addition to gasoline-fueled motor vehicles, other primary man-made sources of these ozone precursors that are regulated by the EPA and the State include highly evaporative solvents and fuels (consumer products and gasoline) and combustion by-products (from power plants, industry, and other engines).

In its notice of proposed rulemaking, “Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone,” the EPA notes that breathing elevated levels of ground-level ozone can:

- Decrease lung function, primarily in children when active outdoors;
- Increase respiratory symptoms, such as coughing and chest pain upon inhalation, particularly in highly sensitive individuals;
• Increase hospital admissions and emergency room visits for respiratory problems among children and adults with pre-existing respiratory diseases, such as asthma;

• Cause inflammation of the lungs;

• Cause possible long-term damage to the lungs; and

• Promote allergic reactions. (See 62 Fed. Reg. 60317 (November 7, 1997).)

Additionally, elevated ozone levels are predicted to cause premature death, the onset of new cases of asthma, and asthma attacks. (EPA; Final Tier 2 Rule: Air Quality Estimation, Selected Health and Welfare Benefit Methods, and Benefits Analyses Results, EPA 420-R-99-032. December 1999.)

In addition to participating in the formation of ozone, VOCs and NO\textsubscript{x} by themselves exhibit serious human health effects. For example, some VOCs, including benzene, formaldehyde and 1,3-butadiene, are classified as Hazardous Air Pollutants (HAPs), also known as air toxics. They have been associated with the onset of cancer and other adverse health effects. As for NO\textsubscript{x}, although nitric oxide (NO) itself is a relatively nonirritating gas, it is readily oxidized to nitrogen dioxide (NO\textsubscript{2}), which can damage respiratory defense mechanisms, allowing bacteria to proliferate and invade the lung tissue. NO\textsubscript{2} causes irritation to the lungs, lower resistance to respiratory infections, and contribute to the development of emphysema, bronchitis, and pneumonia. Oxides of nitrogen also react chemically in the air to form nitric acid, which contributes to acid rain formation.
Along with the formation of ozone, ozone precursors form fine particulates, such as nitrate and sulfate particles, which have their own associated health impacts. These particulates aggravate existing heart and lung diseases, change the body's defenses against inhaled materials, and damage lung tissue. The elderly, children and those with chronic lung or heart disease are the most sensitive. Lung impairment can persist for two to three weeks after exposure to high levels of particulate matter. Chemicals in and on particulates can also be toxic. Very fine particulates (called PM2.5, for particulate matter smaller than 2.5 microns in diameter) can be inhaled deep into the lungs. By reducing the levels of ozone precursors, the enhanced I/M program indirectly reduces the formation of these fine particles in the atmosphere.

Carbon monoxide is a poisonous gas at certain threshold levels. It is absorbed into the bloodstream and may have both direct and indirect effects on the cardiovascular system by interfering with the oxygen-carrying ability of the blood. Exposure to carbon monoxide aggravates angina and other aspects of coronary heart disease and decreases exercise tolerance in persons with cardiovascular problems. In fetuses, infants, elderly persons, and individuals with respiratory diseases, elevated levels of carbon monoxide are also a serious health risk.

Air toxics, also known as hazardous air pollutants, are those pollutants that are known or suspected to cause cancer or other serious health effects, (such as lung irritation, reproductive effects or birth defects) or adverse environmental effects. Examples of air toxics found in gasoline include benzene, toluene, xylenes, ethyl-benzene, hexane and methyl tertiary butyl ether. Detailed information about the health effects of these hazardous air pollutants is available in separate fact sheets from an EPA document entitled "EPA Health Effects Notebook for Hazardous Air
This proposal has been filed with the Office of Administrative Law which may edit it before publishing it in the New Jersey Register. Please refer to the May 20, 2002 New Jersey Register (34 N.J.R. 1811(a)) for the official text of the proposal.


Economic Impact

The Department is proposing these amendments, repeals, and new rules to update and modify the design of the State’s enhanced I/M program to improve its overall efficiency. Since the enhanced I/M program generally improves air quality and thus reduces costs associated with air pollution, the proposed improvements to the program would have a positive economic impact. The air pollution costs reduced by the enhanced I/M program include health care costs and the cost of damage to buildings, materials, crops and vegetation. In addition, by complying with Federal air quality standards, the State and its citizens would avoid the significant adverse economic impact of Federal economic sanctions associated with non-compliance.

Air pollutants have a direct adverse effect on vegetation, livestock, and certain materials, such as rubber and glass. Although economic losses due to air pollution damage in these areas are difficult to quantify (since it is difficult to distinguish between natural deterioration and that which is caused by air pollutants), past estimates have indicated that losses from material damage alone have exceeded $4 billion annually nationwide. (See Godish, Thad., Air Quality (Chelsea, Michigan: Lewis Publishers, Inc., 1991), p.207.) Ground level ozone damages plant life and is responsible in this country for $500 million dollars in reduced crop production.
annually. Ozone also damages the foliage of trees, ruining the landscape of cities, national parks and forests, and recreation areas. (American Lung Association Report: Trends in Air Quality, August 2001.) The enhanced I/M program, with these proposed modifications, would continue to reduce air pollutants, and should substantially reduce the adverse economic effects on vegetation, livestock, and other property.

Finally, but no less importantly, insofar as these program modifications would optimize the enhanced I/M program design and result in the reduction of air pollutants from motor vehicles, these modifications would also serve to ensure that the program has a substantial, economic benefit by decreasing health costs to the public. Health care costs for air pollution-related illnesses in the United States are estimated to be on the order of $50 billion per year. In addition, the American Lung Association estimates that, nationally, 182 million people face health threats from ground-level ozone alone. By decreasing the public's exposure to ozone, VOCs, NO<sub>x</sub>, CO, PM, and air toxics, these amendments, repeals, and new rules should lessen these health care costs.

The April 6, 2001 evaluation of the State’s enhanced I/M program, prepared for Parsons Brinckerhoff - FG, Inc. by Sierra Research, Inc. and entitled "New Jersey NHSDA Program Evaluation," includes data from the enhanced I/M program as it is currently implemented. This data indicates that those vehicles which fail the emissions portion of an enhanced inspection are being properly repaired and returned to compliance status. The average per vehicle repair cost for calendar year 2000 was approximately $160.00, with resulting emission reductions from such vehicles of 57 percent for hydrocarbons (HC), 45 percent for NO and 81 percent for carbon monoxide. This indicates the program’s success both in encouraging
motorists to have their vehicles repaired and in promoting highly cost-effective repairs. In addition, the repair of these vehicles means they should now be operating at an optimum performance level, increasing fuel efficiency (thus reducing the cost to the motorist) and contributing to the State’s and the Nation’s energy conservation efforts.

There are direct costs associated with integrating OBD inspections into the State’s existing enhanced I/M program. However, the State’s enhanced I/M program design has historically provided for the implementation of a mandatory OBD inspection component. As such, the current proposal, which does not add this component but only changes the start date of its implementation, will not result, per se, in OBD implementation costs. These costs are discussed below, however, because the State is now in a better position to provide estimates of these costs.

Integration of OBD inspections into the State’s existing I/M program would require an upgrade to the software currently being used at both the CIFs and the PIFs. Based on data supplied by the equipment manufacturers, the Department projects the total cost of these program modifications for the PIF population to be between two and 2.4 million dollars. For the CIFs, implementation of OBD inspections should already be covered by the State’s contract with Parsons Infrastructure and Technology Group (PI&TG). As such, there should be no additional cost associated with mandatory OBD inspections.

In addition to the development costs associated with the OBD analyzer system upgrade, there would also be a cost to the State to develop the specification(s) for this upgrade, and to test submissions by equipment manufacturers to ensure compliance with the specification(s) prior to release of the upgrade for use by the
CIFs and PIFs. These development and testing costs are estimated at approximately $400,000. The State would also incur costs associated with quality assurance oversight of the expanded program, primarily in the form of additional auditing costs, estimated at approximately $1.2 million.

Another indirect cost that the State would incur associated with the implementation of OBD inspections includes improvements to the data collection network to accommodate additional data storage and transmission as well as modifications to data reporting software. These modifications are expected to cost somewhere between $200,000 and $300,000.

There is also a cost involved in ensuring that individuals inspecting and repairing OBD-equipped motor vehicles are properly trained to do so. There are approximately 4,700 licensed motor vehicle inspectors (inspectors) who would require additional training in order to perform OBD inspections. The average cost of inspector training is projected to be about $200.00 to $300.00. There are also approximately 3,400 certified emission repair technicians (ERTs) who would require additional training in order to perform OBD repairs. These ERTs would have the option of either obtaining OBD repair training at a cost of approximately $300.00 to $400.00 or demonstrating sufficient OBD repair knowledge by passing the appropriate tests given by the National Institute for Automotive Service Excellence at a cost of up to approximately $105.00. The ERTs will also be required to take either the full inspector training course or a shorter version known as the “New Jersey-specific informational course.” Somewhat more than half of the ERTs are also inspectors included in the number of inspectors who will have attended the full course. The cost to the remaining approximately 1,700 ERTs would be
approximately $100.00. While it is not possible to project the precise total cost of this training, the Department projects it as follows:

$250 inspector training course x 4,800 licensed motor vehicle inspectors = $1,200,000

$105.00 ASE testing x 1,700 ERTs= $178,500

$350.00 repair training x 1,700 ERTs= $595,000

$100.00 New Jersey-specific course x 1,700 ERTs = $1,700

yielding a projected total cost in the neighborhood of $2,143,500.

There would also be some initial cost savings to the motorist from some of the proposed amendments and repeals insofar as they remove or make more lenient certain requirements of the program for older model year vehicles. For example, by removing the requirements for the evaporative pressure and purge tests, the proposed amendments would allow motorists whose vehicles would have failed these tests to avoid the cost of the necessary repairs to the evaporative control system if and when these components of the enhanced I/M program were implemented. Similar repair costs would be avoided by motorists whose vehicles would have failed the more stringent “final” ASM5015 standards, if, as proposed, the Department does not implement these “final” ASM5015 standards. These repair savings to the motorist, however, may be outweighed by a resulting loss in emission reduction benefits, particularly in regard to those emission reductions which would have resulted from the implementation of the evaporative pressure and purge tests, primarily for the non-OBD-equipped pre-1996 model year vehicles. Should this be the case, however, the Department is committed to compensating for any lost air
quality benefits associated with these program modifications as needed to meet the air quality objectives.

**Environmental Impact**

The Department is proposing these amendments, repeals, and new rules to update and modify the design of the State’s enhanced I/M program to improve its overall efficiency. Since the enhanced I/M program reduces air pollution from motor vehicles, the proposed improvements to the program would have a positive environmental impact.

The impact of elevated levels of ground-level ozone and carbon monoxide is primarily upon human health and well-being. These effects are discussed at length in the Social Impact above. In addition to the human health effects, studies have shown that increased ozone levels damage foliage. One of the earliest and most obvious manifestations of ozone impact on the environment is damage to sensitive plants. Subsequent effects include reduced plant growth and decreased crop yield. Ozone interferes with the ability of various plants to produce and store nutrients. This causes the plants to become more susceptible to disease, insects, other pollutants and harsh weather. This impacts annual crop production throughout the United States, resulting in significant losses, and injures native vegetation and ecosystems. A reduction in ambient ozone concentrations would mitigate damage to foliage, fruit, vegetables and grain.

Ground-level ozone also damages and degrades certain man-made materials, such as textile fibers, rubber, plastics, dyes, and paints. This degradation is caused by the oxidizing properties of ozone. However, if the photochemical production of ground-level ozone can be limited, as it would continue to be with the
implementation of these proposed amendments and new rules, this degradation would be significantly reduced. (More information is available from an EPA publication entitled “An EPA Fact Sheet on the New 8-Hour Ozone and Fine (2.5 microns) Particulate Matter Health Standards,” July 1997.)

Although ozone is well-known for its damaging effects on the environment, NO\textsubscript{x} can also independently cause significant environmental degradation. Oxides of nitrogen are involved in the deposition of toxics, commonly referred to as acid rain, into lakes and coastal waters. Acid rain damages plants and trees, and injures aquatic life by acidifying lakes and streams. The enhanced I/M program as a whole is designed to decrease emissions of NO\textsubscript{x} into the atmosphere and benefit the environment of New Jersey, and these proposed amendments and new rules would enhance the effects of the enhanced I/M program in doing just that.

Because VOCs and NO\textsubscript{x} are precursors to ozone formation, efforts to attain and maintain the NAAQS for ozone have focused on reducing VOC and NO\textsubscript{x} emissions. According to the Department’s 1996 summer emission inventory, emissions from on-road mobile sources (which includes all the gasoline-fueled motor vehicles covered by the enhanced I/M program) represent 31 percent of VOC emissions and 42 percent of NO\textsubscript{x} emissions in New Jersey. In 1996 in New Jersey VOC emissions were estimated at 991 tons per summer day with 309 tons attributed to emissions from all on-road mobile sources and NO\textsubscript{x} emissions were estimated at 1054 tons per summer day with 454 tons per summer day attributed to emissions from all on-road mobile sources. See “The State of New Jersey Department of Environmental Protection, State Implementation Plan (SIP) Revision for the Attainment and Maintenance of the Ozone National Ambient Air Quality Standard.

Carbon monoxide is generally a localized wintertime pollutant, elevated levels of which are related to colder temperatures and congested traffic. Carbon monoxide is emitted when there is an incomplete combustion of fossil fuels, so that these emissions are typically highest in the winter. The Department has prepared a 1996 wintertime emission inventory that indicates that carbon monoxide emissions in a five-county area of Northern New Jersey totaled 1,365 tons per winter day, with 928 tons per winter day attributed to all on-road mobile sources, suggesting that on-road mobile sources may contribute as much as 70 percent of the wintertime carbon monoxide released into New Jersey's air for that part of the State. See “The State of New Jersey Department of Environmental Protection, State Implementation Plan Revision for the Attainment and Maintenance of the Carbon Monoxide National Ambient Air Quality Standards, Redesignation Request and Maintenance Plan for the New Jersey Portion of the New York-Northern New Jersey-Long Island Carbon Monoxide Nonattainment Area," January 10, 2002.

A fuller discussion of the overall environmental impact of the enhanced I/M program, generally, was provided by the Department in its July 17, 1995 proposal at 27 N.J.R. 2752(a). The State recognizes, however, that its decision to implement a full OBD inspection program (with the continued implementation of the evaporative gas cap test) but not to implement the evaporative pressure and purge tests and not to implement final ASM5015 standards requires an analysis of the projected emission reductions for the enhanced I/M program design. Specifically, the removal of the pressure and purge tests, as well as the final ASM5015 standards, would reduce the SIP emission reduction credits that could be claimed for the State’s
enhanced I/M program. However, full implementation of the mandatory OBD inspection component would result in increased SIP credit, which would likely minimize these SIP credit losses. Although the State is committed to completing this model analysis, it must wait to use the latest version of the USEPA’s mobile source emission model, MOBILE6.

In the past, the Department modeled the emission reduction benefits from its enhanced I/M program using MOBILE5a-H, an emission model developed by the EPA for use by states in determining the HC, carbon monoxide, and NO\textsubscript{x} emission factors for gasoline-fueled and diesel-powered highway motor vehicles. In completing these estimations, the Department modeled the benefits from all adopted components of New Jersey’s enhanced I/M program, including evaporative pressure and purge tests. On January 29, 2002, the EPA released an updated version of its MOBILE6 program to estimate emissions. The new MOBILE6 model incorporates the benefits expected from OBD inspections, and also addresses new research regarding vehicle deterioration rates. Specifically, the EPA determined that newer (model year 1991 and newer) vehicles deteriorate at a slower rate than initially predicted by earlier versions of the MOBILE model. As such, these vehicles pollute less than expected. By incorporating this new information regarding the in-use emissions-related performance of motor vehicles into the development of the MOBILE6 model, the EPA presents MOBILE6 as giving a more realistic picture of the benefits that can be expected from in-use enhanced I/M programs.

With the release of the MOBILE6 model, the State of New Jersey can begin work to complete the analysis discussed above, and submit it as part of its MOBILE6 SIP revision. Specifically, New Jersey has committed to incorporate the effects of the MOBILE6 model on emission estimates into its transportation conformity budgets.
within one year of the new model’s release. Further, the State intends to evaluate the impact the proposed rule changes will have on the overall emission reduction potential of the I/M program and their impact on the State’s Rate of Progress (ROP) Plans and One-Hour Ozone Attainment Demonstration. However, the Department’s staff needs to complete its training with the MOBILE6 model, and work with the DOT and the three Metropolitan Planning Organizations (MPOs) in the State to develop new traffic files that will work with the MOBILE6 model, before it can complete this analysis. If, after completing this analysis, it appears that the State will no longer meet the goals outlined in these plans, the State will address any shortfall.

**Federal Standards Statement**

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. (P.L. 1995, c.65), require State agencies which adopt, readopt or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a Federal standards analysis. The proposed amendments, new rules and repeals to the Department's enhanced I/M program rules do not modify the program design so as to impose standards or requirements that exceed any Federal standards or requirements. (The federal regulations that control establishment of enhanced I/M programs, including on-board diagnostic inspections, are set forth generally at 40 C.F.R. Parts 51 and 85.) Specifically, the Department is proposing to establish the regulatory framework for the implementation of mandatory OBD inspections, and to continue indefinitely the existing "initial" ASM5015 emission standards, by removing (until they can be replaced with more appropriate standards) the “final” ASM5015 emission standards. The proposed program design for the implementation of mandatory OBD inspections does not exceed the Federal requirements set forth at 40 C.F.R. Parts 51 and 85, nor does this proposal impose
ASM5015 standards that exceed Federal requirements for those standards provided by the EPA. Accordingly, neither Executive Order NO. 27 (1994) nor N.J.S.A. 52:14B-23 requires a cost-benefit analysis.

**Jobs Impact**

The Department does not anticipate that there will be any jobs impact from the proposed new rules, repeals or amendments beyond those impacts already described when the requirement for OBD inspections was added to the Department’s enhanced I/M program rules on July 7, 1997 (29 N.J.R. 2826(b)). See the Department’s March 3, 1997 proposal of these provisions at 29 N.J.R. 726(a), and the Jobs Impact published therein. That is, the proposed rulemaking would not impose any new obligations that would result in any job impacts. The only potential job impact that may occur as a result of the proposed rulemaking is a reduced demand for automotive repairs in that some motorists might choose to forego repairs that would have otherwise been required had their vehicles failed the pressure test, the purge test, or the more stringent “final” emissions standards for the ASM5015. This potential loss in repair orders could result in staffing reductions at PIFs. These entities, however, might respond in a number of ways to absorb the loss of income this might entail, other than by reducing staff. Because these entities may respond in different ways, it is not possible to accurately estimate the extent, if any, to which this rulemaking would affect employment in New Jersey and the Department cannot quantify the job impacts connected with this proposal.

**Agriculture Industry Impact**

Pursuant to the requirements of P.L. 1998, c.48, adopted on July 2, 1998, the Department has evaluated this rulemaking to determine the nature and extent to
which the proposed amendments, repeals, and new rules would impact on the agriculture industry. To the extent that the gasoline-fueled motor vehicles subject to enhanced inspections are used in agriculture, the proposed rulemaking would have no greater impact upon the agriculture industry than on any other industry in New Jersey. That is, to the extent that farmers and other participants in the agriculture industry own light-duty gasoline vehicles for which the existing final standards are proposed to be removed and which would no longer be required to pass an evaporative purge or pressure test, they may face somewhat decreased costs of maintaining these vehicles. It should be noted that "non-road" heavy-duty farming equipment is not covered by the enhanced I/M program rules and only the on-road vehicles used in agriculture to, for example, transport passengers, crops and other agriculture-related materials would be covered by the enhanced I/M program. In addition, the air quality improvements expected to be realized in New Jersey as a result of the enhanced I/M program in concert with other ambient ozone control strategies is expected to have a positive impact on the agricultural industry in New Jersey by reducing the damage to sensitive crops by high concentrations of ground-level ozone.

**Regulatory Flexibility Analysis**

In accordance with the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., the Department has determined that the proposed new rules, repeals and amendments would not impose additional reporting or recordkeeping requirements on small businesses (defined in the Regulatory Flexibility Act as those with fewer than 100 employees). However, the proposed amendments, repeals and new rules would impose some additional compliance requirements on the approximately 1,400 licensed PIFs and the approximately 2,200 registered Emission Repair Facilities
(ERFs) in New Jersey that meet the definition of small businesses. (Approximately 1,200 of these businesses are both PIFs and ERFs.) Specifically, the integration of OBD inspections into the enhanced I/M program would require the PIFs to install new data tables and upgrade software. Estimates of these compliance costs are provided in the Economic Impact statement above. No professional services would be required to comply with these requirements other than those provided by the equipment manufacturer in upgrading and installing software. Furthermore, the integration of OBD inspections would have an impact on New Jersey-registered ERFs, insofar as they would now have to repair vehicles to meet these new standards. Professional services required could include additional repair training. None of the other substantive changes proposed herein would impose additional reporting or recordkeeping requirements or additional compliance requirements on small businesses.

By proposing to extend the date by which PIFs and ERFs will be required to comply with the new testing and repair requirements of OBD inspections, this proposed rulemaking is designed to minimize any adverse economic impact on these small businesses.

**Smart Growth Impact**

Executive Order No. 4(2002) requires State agencies which adopt, amend or repeal State rules to include in the rulemaking document a Smart Growth Impact statement that describes the impact of the proposed rule on the achievement of smart growth and implementation of the State Development and Redevelopment Plan (State Plan). The proposed enhanced I/M program rulemaking does not relate to the State’s official land use and development policies in a way that would either
encourage or discourage any development or redevelopment in this State contrary to the guiding principles of the State Plan. As a result, the Department does not expect this rulemaking to have an impact on the State's achievement of smart growth.
Full text of the proposal follows (additions indicated in boldface thus; deletions indicated in brackets [thus]):

7:27-15.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings unless the context clearly indicates otherwise.

“Data link connector” or “DLC” means a standardized 16-pin diagnostic test receptacle used to connect an analyzer to a motor vehicle.

... "Motor vehicle [emission] testing equipment" means equipment used to conduct a test of a gasoline-fueled motor vehicle set forth at N.J.A.C. 7:27B-5, and which satisfies all applicable specifications set forth at N.J.A.C. 7:27B-[5.12] 5.9. Specifications for motor vehicle [emission] testing equipment for use in the New Jersey Enhanced Inspection and Maintenance Program. For motor vehicle inspections conducted pursuant to N.J.A.C. 7:27B-5 and this subchapter, this term shall include all devices used for performing a motor vehicle inspection, including, but not limited to, exhaust gas analyzers, [evaporative pressure testing apparatus, evaporative purge testing apparatus.] dynamometers, on-board diagnostic scanners and analyzers, fuel cap leak testers, and computers and related software.

... “OBD-eligible” means capable of receiving an OBD inspection as determined by the Department in accordance with N.J.A.C. 7:27-15.5(m).
“On board diagnostics” or “OBD” means an automotive diagnostic system complying with California OBD regulations or EPA OBD II regulations effective for model year 1996 and newer motor vehicles.

7:27-15.5 Motor vehicle inspections

(a) (No change.)

(b) The motor vehicle shall be inspected at least once every two years. This biennial inspection shall be deemed an "on-cycle" inspection and shall include an initial inspection, together with any reinspections required pursuant to (h) below. In addition, in accordance with its procedures, the DMV may require the owner of a motor vehicle to have it inspected more frequently than every two years. Such more frequent inspections shall be deemed to be "off-cycle" inspections and shall also include an initial inspection together with any reinspections required pursuant to (h) below. In the case of a motor vehicle subject to the school bus inspection program, as generally set forth at N.J.A.C. 13:20-30, an initial inspection shall be required semi-annually as provided at N.J.A.C. 13:20-30.13.

(c) Initial inspections and reinspections for an on-cycle or an off-cycle inspection shall be performed at either an official inspection facility or at a PIF, or, in the case of a motor vehicle subject to the DMV’s school bus inspection program, as generally set forth at N.J.A.C. 13:20-30.1, at the premises or place of business of the operator of such vehicle, as provided at N.J.A.C. 13:20-30.13.

(d) A motor vehicle inspection is not complete until:
1. The motor vehicle passes all of the tests and satisfies all of the requirements, as specified in (f) below, that constitute the [emission] inspection or reinspection at an appropriate inspection facility, as specified in (c) above; or

2. (No change.)

(e) [Initial inspections] The motor vehicle shall be [performed] inspected as presented at the inspection facility without repair or adjustment[, other than proper tightening of the gas cap, at the inspection facility.] prior to the inspection.

(f) A motor vehicle inspection shall include the following:

1. (No change.)

2. Unless the motor vehicle is exempt pursuant to N.J.A.C. 7:27-15.6(e) or (f), an exhaust emission test or an OBD inspection utilizing motor vehicle [emission] testing equipment approved by the Department. The specific exhaust emission test or OBD inspection to be [used] conducted shall be determined in accordance with (g) below;

3. For an LDGV, LDGT or HDGV of model year 1975 or later, an emission control apparatus compliance examination conducted in accordance with N.J.A.C.7:27B-[5.7] 5.6;

[4. For an LDGV or LDGT of model year 1981 or later originally equipped with an evaporative emission control system, an evaporative
pressure test utilizing motor vehicle emission testing equipment approved by the Department and conducted in accordance with N.J.A.C. 7:27B-5.8;

5. (Reserved);]

[6.]4. For an LDGV, LDGT or HDGV originally equipped with a sealed fuel filler cap (that is, not a directly vented fuel filler cap), [not otherwise subject to an evaporative pressure test pursuant to (f)4 above.] a fuel cap leak test utilizing motor vehicle [emission] testing equipment approved by the Department and conducted in accordance with N.J.A.C. 7:27B-[5.11] 5.8; and

[7. On and after January 1, 2001, for an LDGV or LDGT of model year 1996 or later, an on-board diagnostics test conducted in accordance with N.J.A.C. 7:27B-5.10; and]

[8.] 5. (No change in text.)

(g) [The] On and after June 1, 2003, an OBD-equipped and eligible motor vehicle will receive an OBD inspection. For all other motor vehicles, the exhaust emission test to be used pursuant to (f)2 above shall be [determined] as follows:

1. [Except as specified in (g)2 and 3 below, the exhaust emission test procedure to be used shall be as follows] The idle test set forth at N.J.A.C. 7:27B-5.3(b), if the motor vehicle is any of the following types:
This proposal has been filed with the Office of Administrative Law which may edit it before publishing it in the New Jersey Register. Please refer to the May 20, 2002 New Jersey Register (34 N.J.R. 1811(a)) for the official text of the proposal.

i. [For a] A motor vehicle of model year 1980 or earlier [, the exhaust emission test procedure to be used shall be the idle test set forth at N.J.A.C. 7:27B-5.3(b)] ; [and] or

ii. [For a motor vehicle of model year 1981 or later, the exhaust emission test procedure to be used shall be the ASM5015 test set forth at N.J.A.C. 7:27B-5.5, except that an inspection performed at a PIF may utilize the IM240 test set forth at N.J.A.C. 7:27B-5.6] A motor vehicle that has a GVWR in excess of 8,500 pounds:

2. Notwithstanding the provision of (g)1 above, if the motor vehicle has a GVWR in excess of 8,500 pounds, the exhaust emission test procedure to be used shall be the idle test set forth at N.J.A.C. 7:27B-5.3(b).

3. Notwithstanding the provision of (g)1 above,] 2. The 2,500 RPM test set forth at N.J.A.C. 7:27B-5.4, if the motor vehicle is any of the following types[, the exhaust emission test procedure to be used shall be the 2,500 RPM test set forth at N.J.A.C. 7:27B-5.4] and is not otherwise designated for testing with either the idle test, as determined at(g)1 above, or the ASM5015 test, as determined at (g)3 below:

i. A motor vehicle of model year 1981 or later that employs either full-time four-wheel drive or non-disengageable traction control; [or]
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ii. A low mileage vehicle of model year 1981 or later; or

iii. A gasoline-fueled motor vehicle subject to inspection as part of the school bus inspection program, as generally set forth at N.J.A.C. 13:20-30.13; or

3. The ASM5015 test set forth at N.J.A.C. 7:27B-5.5, if the motor vehicle is any of the following types and is not otherwise designated for testing with either the idle test, as determined at (g)1 above, or the 2,500 RPM test, as determined at (g)2 above:

   i. A motor vehicle of model year 1981 through model year 1995; or

   ii. A motor vehicle of model year 1996 or later, presented for inspection at an inspection facility where Department-approved OBD equipment has been installed;

(h) The owner of a motor vehicle that fails to pass all of the tests that constitute a motor vehicle inspection pursuant to (f) above shall have it reinspected in accordance with every applicable element of (f) [within 30 days] above by the deadline specified by the DMV at N.J.A.C. 13:20-7.5, 7.6(a) or 43.14(g), as applicable. Operation of the motor vehicle upon the public roads, streets or highways of the State or any public or quasi-public property in the State shall be prohibited pursuant to N.J.A.C. 7:27-15.3(c) unless, by the [30-day] deadline established by the DMV at N.J.A.C. 13:20-7.5, 7.6(a) or 43.14(g), as applicable:
1. The motor vehicle passes all of the tests and meets all the requirements that constitute the inspection or reinspection; or

2. (No change.)

(i) An on-road inspection conducted pursuant to N.J.A.C. 13:20-43.14 may include the following:

1. (No change.)

2. Unless the motor vehicle is exempt pursuant to N.J.A.C. 7:27-15.6(e) or (f), an idle test utilizing motor vehicle [emission] testing equipment approved by the Department and conducted in accordance with N.J.A.C. 7:27B-5.3(b);

3. A 2,500 RPM test utilizing motor vehicle testing equipment approved by the Department and conducted in accordance with N.J.A.C. 7:27B-5.4;

4. An ASM5015 test utilizing motor vehicle testing equipment approved by the Department and conducted in accordance with N.J.A.C. 7:27B-5.5;

[3.] 5. For an LDGV, LDGT or HDGV of model year 1975 or later, an emission control apparatus compliance examination conducted in accordance with N.J.A.C. 7:27B-[5.7] 5.6;

[4. For an LDGV or LDGT of model year 1981 or later, originally equipped with an evaporative emission control system, unless the
motor vehicle is exempt pursuant to N.J.A.C. 7:27-15.6(e) or (f), an evaporative pressure test utilizing motor vehicle emission testing equipment approved by the Department and conducted in accordance with N.J.A.C. 7:27B-5.8; and]

6. For an LDGV, LDGT or HDGV originally equipped with a sealed fuel filler cap (that is, not a directly vented fuel filler cap), a fuel cap leak test utilizing motor vehicle testing equipment approved by the Department and conducted in accordance with N.J.A.C. 7:27B-5.8;

7. For an LDGV or LDGT of model year 1996 or later, an OBD inspection utilizing motor vehicle testing equipment approved by the Department and conducted in accordance with N.J.A.C. 7:27B-5.7; and

[5.] 8. (No change in text.)

(j) - (l) (No change.)

(m) A motor vehicle of model year 1996 or later that is equipped with an OBD system will be presumed to be eligible for an OBD inspection unless it meets one of the following criteria:

1. The motor vehicle has a DLC which is in a location not readily accessible during a typical inspection procedure, provided that the DLC is in its original configuration as supplied by the
motor vehicle manufacturer and has not been damaged, removed or modified;

2. The motor vehicle OBD system, as designed by the motor vehicle manufacturer, has difficulty setting or maintaining an adequate number of readiness monitors;

3. The motor vehicle OBD system, as designed by the motor vehicle manufacturer, employs a communications protocol which is currently incompatible with approved motor vehicle testing equipment; or

4. The motor vehicle is otherwise identified by the EPA or the Department as not technologically or functionally capable of OBD inspection.

(n) The Department shall maintain a list of makes and model years of motor vehicles that it has determined to not be OBD-eligible, based on the criteria set forth at (m) above. A copy of this list will be available from the Department by contacting the Bureau of Transportation Control at (609) 530-4035 and can also be viewed and downloaded from the Department’s website at www.state.nj.us/dep/aqm.

7:27-15.6 Motor vehicle inspection standards

(a) Any light-duty gasoline-fueled vehicle, light-duty gasoline-fueled truck or heavy-duty gasoline-fueled vehicle shall not emit visible smoke in the exhaust emissions or in the crankcase emissions for a period in excess of
three consecutive seconds when measured using the test procedure established at N.J.A.C. 7:27B-5.3(a).

(b) [Any] A light-duty gasoline-fueled vehicle, light-duty gasoline-fueled truck or heavy-duty gasoline-fueled vehicle shall not emit carbon monoxide (CO), hydrocarbons (HC), or oxides of nitrogen (NOₓ) in the exhaust emissions in excess of the following standards:

1.-2. (No change.)

3. If, pursuant to the provisions of N.J.A.C. 7:27-15.5(g), a motor vehicle is tested using the ASM5015 test, the motor vehicle shall be subject to the applicable exhaust emission standards set forth in Table 3 below. Compliance with these standards shall be determined in accordance with the inspection test procedure at N.J.A.C. 7:27B-5.5; or

4. If, pursuant to the provisions of N.J.A.C. 7:27-15.5(g), a motor vehicle is tested using the IM240 test, the motor vehicle shall be subject to the applicable exhaust emission standards set forth in Table 4 below. Compliance with these standards shall be determined in accordance with the inspection test procedure at N.J.A.C. 7:27B-5.6.]

TABLE 2
EXHAUST EMISSION STANDARDS
FOR THE 2,500 RPM TEST
(No change.)

3. If, pursuant to the provisions of N.J.A.C. 7:27-15.5(g), a motor vehicle is tested using the ASM5015 test, the motor vehicle
shall be subject to the applicable exhaust emission standards set forth in Table 3 below. Compliance with these standards shall be determined in accordance with the inspection test procedure at N.J.A.C. 7:27B-5.5.

TABLE 3
EXHAUST EMISSION STANDARDS
FOR THE ASM5015 TEST

LDGVs Powered by Gasoline
[(Effective through December 31, 2001)]

<table>
<thead>
<tr>
<th>Model Years</th>
<th>HC</th>
<th>CO</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1982</td>
<td>4</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>1983-1990</td>
<td>4</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>1991-1995</td>
<td>2</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>1994+ Tier 1</td>
<td>1</td>
<td>9</td>
<td>17</td>
</tr>
</tbody>
</table>

*The numbers given in this column refer to the appropriate column number in Table [5] 4 below, which contains the actual exhaust emission standards.

LDGVs Powered by a Fuel Other Than Gasoline
[(Effective through December 31, 2001)]
(Reserved)
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### LDGT1s Powered by Gasoline

**[(Effective through December 31, 2001)]**

<table>
<thead>
<tr>
<th>Model Years</th>
<th>HC</th>
<th>CO</th>
<th>NOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1983</td>
<td>8</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>1984-1987</td>
<td>6</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>1988-1990</td>
<td>6</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>1991-1995</td>
<td>5</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>1994+ Tier 1</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(&lt;3750 LVW)</td>
<td>1</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>(&gt;3750 LVW)</td>
<td>2</td>
<td>10</td>
<td>18</td>
</tr>
</tbody>
</table>

*The numbers given in this column refer to the appropriate column number in Table 5.4 below, which contains the actual exhaust emission standards.*

### LDGT1s Powered by a Fuel Other Than Gasoline

**[(Effective through December 31, 2001)]**

(Reserved)

### LDGT2s Powered by Gasoline

**[(Effective through December 31, 2001)]**

<table>
<thead>
<tr>
<th>Model Years</th>
<th>HC</th>
<th>CO</th>
<th>NOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1983</td>
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<td>24</td>
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<td>1984-1987</td>
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<td>23</td>
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<tr>
<td>1991-1995</td>
<td>5</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>1994+ Tier 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(&lt;5750 LVW)</td>
<td>2</td>
<td>10</td>
<td>18</td>
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<tr>
<td>(&gt;5750 LVW)</td>
<td>5</td>
<td>13</td>
<td>21</td>
</tr>
</tbody>
</table>

*The numbers given in this column refer to the appropriate column number in Table 5.4 below, which contains the actual exhaust emission standards.*
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LDGT2s Powered by a Fuel Other Than Gasoline  
[(Effective through December 31, 2001)]  
(Reserved)

[LDGVs Powered by Gasoline  
(Effective January 1, 2002)]

<table>
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<th>Model Years</th>
<th>HC</th>
<th>CO</th>
<th>NOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1982</td>
<td>1</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>1983+</td>
<td>1</td>
<td>9</td>
<td>17</td>
</tr>
</tbody>
</table>

*The numbers given in this column refer to the appropriate column number in Table 5 below, which contains the actual exhaust emission standards.

LDGVs Powered by a Fuel Other Than Gasoline  
(Effective January 1, 2002)  
(Reserved)

LDGT1s Powered by Gasoline  
(Effective January 1, 2002)

<table>
<thead>
<tr>
<th>Model Years</th>
<th>HC</th>
<th>CO</th>
<th>NOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1983</td>
<td>7</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>1984-1987</td>
<td>3</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>1988-1995</td>
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<td>18</td>
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<tr>
<td>1994+ Tier 1</td>
<td>1</td>
<td>9</td>
<td>17</td>
</tr>
</tbody>
</table>

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LDGT1s Powered by a Fuel Other Than Gasoline  
(Effective January 1, 2002)  
(Reserved)
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LDGT2s Powered by Gasoline
(Effective January 1, 2002)

<table>
<thead>
<tr>
<th>Model Years</th>
<th>HC</th>
<th>CO</th>
<th>NOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981-1983</td>
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<td>14</td>
<td>22</td>
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<td>1984-1987</td>
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</tr>
<tr>
<td>1988-1995</td>
<td>3</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>1994+ Tier 1</td>
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<td>9</td>
<td>17</td>
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</tbody>
</table>

*The numbers given in this column refer to the appropriate column number in Table 5 below, which contains the actual exhaust emission standards.

**TABLE 4**

EXHAUST EMISSION STANDARDS FOR THE IM240 TEST

LDGVs Powered by Gasoline
(effective through December 31, 2001)

<table>
<thead>
<tr>
<th>Model Years</th>
<th>HC (g/mi)</th>
<th>CO (g/mi)</th>
<th>NOx (g/mi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite</td>
<td>Phase 2</td>
<td>Composite</td>
<td>Phase 2</td>
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<tr>
<td>1968-1972</td>
<td>10.0</td>
<td>6.00</td>
<td>150</td>
</tr>
<tr>
<td>1973-1974</td>
<td>10.0</td>
<td>6.00</td>
<td>150</td>
</tr>
<tr>
<td>1975-1976</td>
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<td>1977-1979</td>
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<td>1980</td>
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<td>60.0</td>
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<td>1981-1982</td>
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<td>1983-1990</td>
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<td>1991-1995</td>
<td>1.20</td>
<td>0.75</td>
<td>20.0</td>
</tr>
<tr>
<td>1994+Tier 1</td>
<td>0.80</td>
<td>0.50</td>
<td>15.0</td>
</tr>
</tbody>
</table>

LDGVs Powered by a Fuel Other Than Gasoline
(effective through December 31, 2001)
(Reserved)
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LDGT1s Powered by Gasoline  
(effective through December 31, 2001)

<table>
<thead>
<tr>
<th>Model Years</th>
<th>HC (g/mi)</th>
<th>CO (g/mi)</th>
<th>NOx (g/mi)</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Composite</td>
<td>Phase 2</td>
<td>Composite</td>
</tr>
<tr>
<td>1968-1972</td>
<td>10.0</td>
<td>6.00</td>
<td>150</td>
</tr>
<tr>
<td>1973-1974</td>
<td>10.0</td>
<td>6.00</td>
<td>150</td>
</tr>
<tr>
<td>1975-1978</td>
<td>8.00</td>
<td>5.00</td>
<td>120</td>
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<td>1979-1983</td>
<td>7.50</td>
<td>5.00</td>
<td>100</td>
</tr>
<tr>
<td>1984-1987</td>
<td>3.20</td>
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<td>1991-1995</td>
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<td>1.50</td>
<td>60.0</td>
</tr>
<tr>
<td>1994+ Tier 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(LVW ≤3750)</td>
<td>0.80</td>
<td>0.50</td>
<td>15.0</td>
</tr>
<tr>
<td>(LVW &gt;3750)</td>
<td>1.00</td>
<td>0.63</td>
<td>20.0</td>
</tr>
</tbody>
</table>

LDGT1s Powered by a Fuel Other Than Gasoline  
(effective through December 31, 2001)  
(Reserved)
LDGT2s Powered by Gasoline (effective through December 31, 2001)

<table>
<thead>
<tr>
<th>Model Years</th>
<th>HC (g/mi)</th>
<th>CO (g/mi)</th>
<th>NOx (g/mi)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Composite</td>
<td>Phase 2</td>
<td>Composite</td>
</tr>
<tr>
<td>1968-1972</td>
<td>10.0</td>
<td>6.00</td>
<td>150</td>
</tr>
<tr>
<td>1973-1974</td>
<td>10.0</td>
<td>6.00</td>
<td>150</td>
</tr>
<tr>
<td>1975-1978</td>
<td>8.00</td>
<td>5.00</td>
<td>120</td>
</tr>
<tr>
<td>1979-1983</td>
<td>7.50</td>
<td>5.00</td>
<td>100</td>
</tr>
<tr>
<td>1984-1987</td>
<td>3.20</td>
<td>2.00</td>
<td>80.0</td>
</tr>
<tr>
<td>1988-1990</td>
<td>3.20</td>
<td>2.00</td>
<td>80.0</td>
</tr>
<tr>
<td>1991-1995</td>
<td>2.40</td>
<td>1.50</td>
<td>60.0</td>
</tr>
<tr>
<td>1994+ Tier 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(LVW ≤ 5750)</td>
<td>1.00</td>
<td>0.63</td>
<td>20.0</td>
</tr>
<tr>
<td>(LVW &gt; 5750)</td>
<td>2.40</td>
<td>1.50</td>
<td>60.0</td>
</tr>
</tbody>
</table>

LDGT2s Powered by a Fuel Other Than Gasoline (effective through December 31, 2001) (Reserved)

LDGVs Powered by Gasoline (effective January 1, 2002)

<table>
<thead>
<tr>
<th>Model Years</th>
<th>HC (g/mi)</th>
<th>CO (g/mi)</th>
<th>NOx (g/mi)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Composite</td>
<td>Phase 2</td>
<td>Composite</td>
</tr>
<tr>
<td>1968-1972</td>
<td>7.00</td>
<td>4.50</td>
<td>120</td>
</tr>
<tr>
<td>1973-1974</td>
<td>7.00</td>
<td>4.50</td>
<td>120</td>
</tr>
<tr>
<td>1975-1976</td>
<td>3.00</td>
<td>2.00</td>
<td>65.0</td>
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<tr>
<td>1977-1979</td>
<td>3.00</td>
<td>2.00</td>
<td>65.0</td>
</tr>
<tr>
<td>1980</td>
<td>0.80</td>
<td>0.50</td>
<td>30.0</td>
</tr>
<tr>
<td>1981-1982</td>
<td>0.80</td>
<td>0.50</td>
<td>30.0</td>
</tr>
</tbody>
</table>
This proposal has been filed with the Office of Administrative Law which may edit it before publishing it in the New Jersey Register. Please refer to the May 20, 2002 New Jersey Register (34 N.J.R. 1811(a)) for the official text of the proposal.

<table>
<thead>
<tr>
<th>Model Years</th>
<th>HC (g/mi)</th>
<th>CO (g/mi)</th>
<th>NOx (g/mi)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Composite</td>
<td>Phase 2</td>
<td>Composite</td>
</tr>
<tr>
<td>1968-1972</td>
<td>7.00</td>
<td>4.50</td>
<td>120</td>
</tr>
<tr>
<td>1973-1974</td>
<td>7.00</td>
<td>4.50</td>
<td>120</td>
</tr>
<tr>
<td>1975-1978</td>
<td>4.00</td>
<td>2.50</td>
<td>80.0</td>
</tr>
<tr>
<td>1979-1983</td>
<td>3.40</td>
<td>2.00</td>
<td>70.0</td>
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<td>1984-1987</td>
<td>1.60</td>
<td>1.00</td>
<td>40.0</td>
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<td>1988-1995</td>
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<td>1.00</td>
<td>40.0</td>
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<tr>
<td>1994+ Tier 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(LVW ≤ 3750)</td>
<td>0.80</td>
<td>0.40</td>
<td>10.0</td>
</tr>
<tr>
<td>(LVW &gt; 3750)</td>
<td>1.00</td>
<td>0.50</td>
<td>13.0</td>
</tr>
</tbody>
</table>

LDGT1s Powered by a Fuel Other Than Gasoline
(Effective January 1, 2002)
(Reserved)
LDGT2s Powered by Gasoline  
(effective January 1, 2002)

<table>
<thead>
<tr>
<th>Model Years</th>
<th>HC (g/mi)</th>
<th>CO (g/mi)</th>
<th>NOx (g/mi)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Composite</td>
<td>Phase 2</td>
<td>Composite</td>
</tr>
<tr>
<td>1968-1972</td>
<td>7.00</td>
<td>4.50</td>
<td>120</td>
</tr>
<tr>
<td>1973-1974</td>
<td>7.00</td>
<td>4.50</td>
<td>120</td>
</tr>
<tr>
<td>1975-1978</td>
<td>4.00</td>
<td>2.50</td>
<td>80.0</td>
</tr>
<tr>
<td>1979-1983</td>
<td>3.40</td>
<td>2.00</td>
<td>70.0</td>
</tr>
<tr>
<td>1984-1987</td>
<td>1.60</td>
<td>1.00</td>
<td>40.0</td>
</tr>
<tr>
<td>1988-1995</td>
<td>1.60</td>
<td>1.00</td>
<td>40.0</td>
</tr>
<tr>
<td>1994+ Tier 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(LVW ≤5750)</td>
<td>0.80</td>
<td>0.50</td>
<td>13.0</td>
</tr>
<tr>
<td>(LVW &gt;5750)</td>
<td>0.80</td>
<td>0.50</td>
<td>15.0</td>
</tr>
</tbody>
</table>

LDGT2s Powered by a Fuel Other Than Gasoline  
(effective January 1, 2002)  
(Reserved)

Table [5] 4 (No change to text)

4. If, pursuant to the provisions of N.J.A.C. 7:27-15.5(g), a motor vehicle is tested using an OBD inspection conducted in accordance with the inspection test procedure at N.J.A.C. 7:27B-5.7, it shall be considered to have passed said inspection unless:

i. The DLC can not be found or is damaged/obstructed in such a way as to not allow a connection between the analyzer and the motor vehicle;
ii. Communication cannot be established between the analyzer and the vehicle’s OBD system;

iii. The MIL is not illuminating when commanded to light;

iv. The number of systems which have readiness monitors which are not ready for inspections exceeds the following criteria: three “not ready” codes for motor vehicles model year 1996 through 2000 and two “not ready” codes for motor vehicles model year 2001 and newer, as established at 40 C.F.R. §51.357, incorporated herein by reference;

v. DTCs have been detected by the OBD system to cause the MIL to be commanded on; or

vi. A motor vehicle fails an initial OBD inspection as indicated by one or more catalyst DTCs, and fails a tailpipe test conducted on reinspection to confirm catalyst repairs in the case where the catalyst readiness monitor indicates the monitor is not ready during the OBD reinspection.

(c) A gasoline-fueled motor vehicle which is subject to inspection pursuant to N.J.A.C. 7:27-15.5(a) shall, as a condition of compliance with said inspection, have a properly functioning and properly maintained emission control apparatus as determined according to the inspection test procedures established at N.J.A.C. 7:27B-[5.7, 5.8, 5.9, 5.10 and 5.11] 5.6.
(d) Except as provided in (e) and (f) below, the applicability of the standards set forth in this subchapter and of the test procedures set forth at N.J.A.C. 7:27B-5.3 [5.4, 5.5, 5.6, 5.7, 5.8, [5.9, 5.10 and 5.11]] inclusive, to a motor vehicle with an engine other than the engine originally installed by the manufacturer shall be based on the chassis type and model year of the motor vehicle, not on the engine model year.

(e) A motor vehicle that is modified to operate solely on a fuel other than that for which the motor vehicle was originally equipped shall be subject to the test procedures and standards applicable to a motor vehicle of the current fuel type. If the motor vehicle’s fuel type after modification is one to which this subchapter does not apply (for example, a gasoline engine replaced with a diesel engine), the motor vehicle shall be exempt from this subchapter. If the motor vehicle’s fuel type after modification is a fuel type to which this subchapter applies, but is other than gasoline (for example, a gasoline engine modified to operate solely on natural gas), the standards applicable to that motor vehicle shall be those prescribed in the Tables 1, 2[, 3] and [4] 3 above for motor vehicles powered by a fuel other than gasoline. Until such time that applicable exhaust emission standards are promulgated for motor vehicles powered by fuels other than gasoline, such vehicles shall be exempt from exhaust emission testing when operating on a fuel other than gasoline.

(f) A motor vehicle that is modified or manufactured to operate on more than one fuel type shall be subject to exhaust emission standards that apply to the motor vehicle for each fuel type for which the motor vehicle is equipped. Such motor vehicle shall be subject to an exhaust emission test for each fuel type on which it operates and shall comply with all applicable standards for
each fuel type. Such motor vehicle shall also be subject to [an evaporative pressure test and an evaporative purge] a **fuel cap leak** test when operating on gasoline. If the motor vehicle is capable of simultaneous operation on more than one fuel type (for example, flexible fuel, gasoline-methanol vehicle), the motor vehicle shall be subject to an exhaust emission test using the fuel mixture in the vehicle at the time of inspection and subject to the exhaust emission standards applicable to vehicles powered by gasoline. When operating on a fuel other than gasoline, the exhaust emission standards applied to a motor vehicle shall be those prescribed in the Tables 1, 2[3] and [4] above for motor vehicles powered by a fuel other than gasoline. Until such time that applicable exhaust emission standards are promulgated for motor vehicles powered by fuels other than gasoline, such vehicles shall be exempt from exhaust emission testing when operating on a fuel other than gasoline.

(g) (No change.)
This proposal has been filed with the Office of Administrative Law which may edit it before publishing it in the New Jersey Register. Please refer to the May 20, 2002 New Jersey Register (34 N.J.R. 1811(a)) for the official text of the proposal.

**APPENDIX**

The following table highlights the provisions of N.J.A.C. 7:27-15.5(g) to show generally the exhaust emissions test or OBD inspection to be administered to each category of vehicle inspected or reinspected:

<table>
<thead>
<tr>
<th>Test/model year</th>
<th>1980 and older</th>
<th>1981 - 1995</th>
<th>1996 and newer*</th>
</tr>
</thead>
<tbody>
<tr>
<td>idle</td>
<td>all</td>
<td>GVWR &gt; 8500</td>
<td>GVWR &gt; 8500</td>
</tr>
<tr>
<td>2,500 RPM</td>
<td>-</td>
<td>all-wheel drive, low mileage, etc. school bus</td>
<td>all-wheel drive, low mileage, etc. school bus</td>
</tr>
<tr>
<td>ASM5015</td>
<td>-</td>
<td>all others not covered above</td>
<td>all others not covered above</td>
</tr>
<tr>
<td>OBD (after 6/1/2003)</td>
<td>-</td>
<td>-</td>
<td>all OBD-equipped and eligible</td>
</tr>
</tbody>
</table>

*Note: On and after June 1, 2003, an OBD-equipped and eligible motor vehicle will receive an OBD inspection.
This proposal has been filed with the Office of Administrative Law which may edit it before publishing it in the New Jersey Register. Please refer to the May 20, 2002 New Jersey Register (34 N.J.R. 1811(a)) for the official text of the proposal.

**SUBCHAPTER 5. AIR TEST METHOD 5: TESTING PROCEDURES FOR GASOLINE-FUELED VEHICLES**

7:27B-5.1 Definitions

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

... 

“Data link connector” or “DLC” means a standardized 16-pin diagnostic test receptacle used to connect an analyzer to a motor vehicle.

... 

“Key on engine off” or “KOEO” means the motor vehicle ignition position of key-on, engine-off. This may be denoted on some ignitions by a "run" position and is the key position just prior to holding the key in the "start" position to start the engine. Although this is the same key position as KOER, the KOEO position implies that the motor vehicle engine is not running.

“Key on engine running” or “KOER” means the motor vehicle ignition position of key-on, engine-running. This may be denoted on some ignitions by a "run" position and is the key position just prior to holding the key in the "start" position to start the engine. Although this is the same key position as KOEO, the KOER position implies that the motor vehicle engine is running.

...
"Malfunction indicator light" or "MIL" means the light located on the dashboard instrument panel of an OBD-equipped motor vehicle that indicates a malfunction detected by the OBD system by illuminating the words "check engine," "service engine," or an engine pictograph with the word "check" or "service."

"Motor vehicle [emission] testing equipment" means equipment used to conduct a test of a gasoline-fueled motor vehicle set forth at N.J.A.C. 7:27B-5, and which satisfies all applicable specifications set forth at N.J.A.C. 7:27B-[5.12] 5.9, Specifications for motor vehicle [emission] testing equipment for use in the New Jersey Enhanced Inspection and Maintenance Program. For motor vehicle inspections conducted pursuant to N.J.A.C. 7:27-15 and this subchapter, this term shall include all devices used for performing a motor vehicle inspection, including, but not limited to, exhaust gas analyzers, [evaporative pressure testing apparatus, evaporative purge testing apparatus,] dynamometers, on-board diagnostic scanners and analyzers, fuel cap leak testers, and computers and related software.

"OBD-eligible" means capable of receiving an OBD inspection as determined by the Department in accordance with N.J.A.C. 7:27-15.5(m).

"On-board diagnostics" or "OBD" means an automotive diagnostic system complying with California OBD regulations or EPA OBD II regulations effective for model year 1996 and newer motor vehicles.

"Readiness" means the state of a motor vehicle’s OBD system that has successfully completed self-diagnostic routines on all supported subsystems.
as indicated by a showing of “ready” on all supported readiness monitors. Readiness does not indicate that the motor vehicle has passed the OBD inspection but only that the motor vehicle’s OBD system is ready for inspection.

"Readiness monitors" means the various indicators used by a motor vehicle's on-board computer to record the status of subsystem diagnostic routines. A readiness monitor may record a subsystem as “ready,” “not ready” or “not supported.”

7:27B-5.2 General instructions for all tests

(a) An inspector, conducting an emissions test on a gasoline-fueled motor vehicle pursuant to any provision of this subchapter, including, but not limited to, N.J.A.C. 7:27B-5.3[5.4, 5.5, 5.6, 5.7,] through 5.8, [5.9, 5.10 and 5.11,] shall perform the test in accordance with the following general procedures:

1. - 8. (No change.)

(b) Equipment to be used in conducting an emissions test on a gasoline-fueled motor vehicle in accordance with N.J.A.C. 7:27-15.5 shall satisfy all specifications and standards for motor vehicle testing equipment as set forth [in] at N.J.A.C. 7:27B-[5.12] 5.9.

(c) An inspector conducting a motor vehicle emissions test on a gasoline-fueled motor vehicle as set forth in this subchapter shall use only motor vehicle [emission] testing equipment that has been approved by the
Department prior to its use in the test. Approval by the Department is based on the following criteria:

1. The equipment [meets all applicable specifications] **conforms** to the requirements set forth at N.J.A.C. 7:27B-5.9;

2. - 4. *(No change.)*

*(d) *(No change.)*

**(7:27B-5.6 Procedures for the IM240 test)**

(a) The IM240 testing procedure may be used on motor vehicles subject to the exhaust emission test in accordance with N.J.A.C. 7:27-15.5(g) or on motor vehicles subject to a program evaluation test in accordance with N.J.A.C. 7:27-15.5(l).

(b) The procedures for the IM240 test are specified as follows:

1. On and after the date EPA promulgates the exhaust test procedures to be used for the IM240 test at 40 C.F.R. 85.2221, such procedures and all subsequent revisions thereto shall be incorporated herein by reference;

2. Until EPA promulgates such procedures, the applicable procedures shall be those described in the EPA technical guidance document EPA420 R-98-010, entitled IM240 and Evap Technical Guidance, incorporated herein by reference. A copy of this EPA technical guidance document has been filed with the Office of Administrative Law and may be obtained from the Public Access Center
in the Department of Environmental Protection. If the emissions of carbon monoxide, hydrocarbons, or oxides of nitrogen recorded using these procedures exceed the applicable standards specified in Table 4 at N.J.A.C. 7:27-15.6, the motor vehicle shall be determined to fail the IM240 test.]

7:27B-[5.7] 5.6 (No change in text.)

[7:27B-5.8 Procedures for the evaporative pressure test

(a) The testing procedure for the evaporative pressure test, to be used to determine a motor vehicle's compliance with the evaporative pressure test requirements at N.J.A.C. 7:27-15.5(f)4, is specified as follows:

1. On and after the date EPA promulgates the procedures to be used for the evaporative pressure test at 40 C.F.R. 85.2222, or elsewhere in Title 40, such procedures and standards and all subsequent revisions thereto shall be incorporated herein by reference;

2. Until EPA promulgates such procedures and standards, the applicable procedures and standards shall be those described in the EPA technical guidance document EPA420 R-98-010, entitled IM240 and Evap Technical Guidance, incorporated herein by reference. A copy of this EPA technical guidance document has been filed with the Office of Administrative Law and may be obtained from the Public Access Center in the Department of Environmental Protection.

7:27B-5.9 (Reserved)]
7:27B-[5.10] 5.7 Procedures for the on-board diagnostics [testing] inspection

(a) The [on-board diagnostics test procedure shall be performed in accordance with the procedures at 40 C.F.R. 85.2222, and all subsequent revisions thereto, incorporated herein by reference.] procedure for the OBD inspection, to be used to determine a motor vehicle’s compliance with the OBD inspection requirements at N.J.A.C. 7:27-15.5(f)2, is specified as follows:

1. Turn off the motor vehicle’s engine and connect the analyzer to the motor vehicle computer via the DLC located on the motor vehicle;

2. If the DLC is damaged, missing or obstructed, the motor vehicle has failed the OBD inspection;

3. Determine if the MIL is functional by briefly turning the motor vehicle ignition system to the KOEO position;

4. If the MIL is not functional, the motor vehicle has failed the OBD inspection;

5. Start the motor vehicle and leave the engine running. The analyzer will attempt to communicate with the motor vehicle’s OBD system;

6. If the analyzer cannot successfully communicate with the motor vehicle’s OBD system, the motor vehicle has failed the OBD inspection;
7. If the analyzer successfully communicates with the motor vehicle OBD system, it will then retrieve stored information relating to the identification of the motor vehicle and any malfunctions recorded by the OBD system;

8. If the analyzer determines that the OBD system or the motor vehicle is malfunctioning, the motor vehicle has failed the OBD inspection;

9. If the analyzer indicates that the motor vehicle does not meet the EPA's criteria for "readiness," that is, if the vehicle's OBD system does not indicate that the critical number of supported readiness monitors have been set, the motor vehicle is deemed "not ready" for an OBD inspection and has failed the OBD inspection;

10. If the analyzer indicates that the motor vehicle is deemed "ready" and determines that all components of the OBD system are functioning properly, and the OBD system is not indicating any malfunctions of the motor vehicle, then the motor vehicle has passed the OBD inspection;

11. A motor vehicle that failed an initial OBD inspection for not having a properly functioning catalyst must, on reinspection, pass both the OBD inspection and the appropriate tailpipe exhaust test, as determined at N.J.A.C. 7:27-15.5(g), if, on reinspection, the
readiness monitor is not set (that is, is “not ready”) for the motor vehicle’s catalyst.

(b) The OBD inspection procedure is largely a process whereby the motor vehicle testing equipment and the motor vehicle’s OBD system interface and exchange information. As such, the description of the on-board diagnostics inspection procedure set forth at (a) above is a brief, simplified description that does not contain explicit technical details. A more detailed flow chart version, reflecting the logic flow of pass and fail determinations within the procedure, as well as the Department’s OBD equipment specifications, which contain additional technical details, are available electronically by contacting the Department’s Bureau of Transportation Control at (609) 530-4035.

(c) In the case of a motor vehicle that is not OBD-eligible, as determined by the Department in accordance with N.J.A.C. 7:27-15.5(m), the procedure to be used to determine compliance with the OBD inspection requirements at N.J.A.C. 7:27-15.5(f)2, is specified as follows:

1. Determine if the MIL is functional by briefly turning the motor vehicle ignition system to the KOEO position;

2. If the MIL is not functional, the motor vehicle has failed the OBD inspection;

3. Start the motor vehicle and leave the engine running. Determine if the MIL remains illuminated while the engine is running;
4. If the MIL is illuminated with the engine running, the motor vehicle has failed the OBD inspection;

5. Administer the appropriate tailpipe exhaust test, as determined at N.J.A.C. 7:27-15.5(g);

6. If the MIL is determined to be functional and is not illuminated with the engine running, then the results of the appropriate tailpipe exhaust test will be used to determine the pass or fail status of the motor vehicle;

7. If the motor vehicle has failed the OBD inspection described in (c)1 through 4 above, the reinspection of the motor vehicle shall include both a repeat of the procedure described in (c)1 through 4 above and, if it has also failed the appropriate tailpipe exhaust pursuant to (c)5 above, a repeat of the tailpipe exhaust test.

7:27B-[5.11] 5.8 Procedures for the fuel cap leak test

(a) An inspector conducting a fuel cap leak test to determine a gasoline-fueled motor vehicle's compliance with the fuel cap leak test requirements at N.J.A.C. 7:27-15.5(f)[6] shall perform the test as follows:

1. (No change.)

2. Until EPA promulgates such procedures and standards, the applicable procedures and standards shall be those described in the EPA technical guidance document [EPA-AA-RSPD-I/M-98-1] EPA420 R-00-007, entitled IM240 and Evap Technical Guidance, incorporated
herein by reference. A copy of this EPA technical guidance document [has been filed with the Office of Administrative Law and] may be obtained from the Public Access Center in the Department of Environmental Protection.

**7:27B-[5.12] 5.9 Specifications for motor vehicle [emission] testing equipment for use in the New Jersey Enhanced Inspection and Maintenance Program**

(a) *(No change.)*

(b) Equipment used for performing the ASM5015 test, [specified] **as set forth** at N.J.A.C. 7:27B-5.5, shall conform with the following:

1. *(No change.)*

2. Until EPA promulgates such specifications, the applicable specifications shall be those described in the EPA technical guidance document EPA-AA-RSPD-I/M-96-2, entitled Acceleration Simulation Mode Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications, July 1996, incorporated herein by reference. A copy of this EPA technical guidance document [has been filed with the Office of Administrative Law and] may be obtained from the Public Access Center in the Department of Environmental Protection.

[(c) Equipment used for performing the IM240 test, as set forth at N.J.A.C. 7:27B- 5.6, shall conform with the following:]
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1. On and after the date EPA promulgates the IM240 equipment specifications at 40 C.F.R. 85.2226, such specifications and all subsequent revisions thereto shall be incorporated herein by reference;

2. Until EPA promulgates such specifications, the applicable specifications shall be those described in the EPA technical guidance document EPA420 [R-98-010] R-00-007, entitled IM240 and Evap Technical Guidance, incorporated herein by reference. A copy of this EPA technical guidance document has been filed with the Office of Administrative Law and may be obtained from the Public Access Center in the Department of Environmental Protection.

[(d)] (c) Equipment used for performing [the evaporative pressure test, as set forth at N.J.A.C. 7:27B-5.8 or] the fuel cap leak test, as set forth at N.J.A.C. 7:27B-[5.10] 5.8, shall be in accordance with the following:

1. (No change.)

2. Until EPA promulgates such specifications, the applicable specifications shall be those described in the EPA technical guidance document EPA420 [R-98-010] R-00-007, entitled IM240 and Evap Technical Guidance, incorporated herein by reference. A copy of this EPA technical guidance document [has been filed with the Office of Administrative Law and] may be obtained from the Public Access Center in the Department of Environmental Protection.

[(e)] (d) Equipment used for performing the [on-board diagnostics test] **OBD inspection**, as set forth at N.J.A.C. 7:27B-[5.10] 5.7, shall be [in
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accordance with] approved by the Department as provided at N.J.A.C. 7:27B-5.2(c) and shall conform with the provisions of 40 C.F.R. 85.2231,
and all subsequent revisions thereto, incorporated herein by reference.