

**The State of New Jersey
Department of Environmental Protection**

**Revisions to the Enhanced Inspection and
Maintenance (I/M) Program for the State of New Jersey**

**Elimination of Tailpipe Testing and Other I/M Program
Changes**

**I/M Program Modeling and USEPA Performance
Standard Modeling**

SIP Revision

**Appendix I
History of New Jersey's I/M SIP**

September, 2016

History of New Jersey's I/M SIP

A. Basic I/M SIP

In 1974, New Jersey, under commitments made in its basic I/M SIP, implemented its basic I/M program. At that time, the State's basic I/M SIP consisted of an annual inspection program whereby all gasoline-fueled motor vehicles, unless specifically exempt through law or regulation, were subject to an idle exhaust emission test. Although several subsequent revisions were made to the State's basic I/M SIP, the core program remained unchanged. Major changes in the State's basic I/M program over time included: 1) the addition of a visual inspection for the presence of a catalytic converter, 2) the addition of an inlet restrictor test to determine whether a vehicle's fuel inlet was sufficiently narrow as to preclude use of a leaded gasoline nozzle, thereby preventing the use of leaded fuel, and 3) modification of the program network design to allow for private inspection facilities (PIFs). This third major change expanded the inspection facility network to include non-state-operated inspection facilities that could do both inspections and repairs. Although these private facilities were originally only allowed to perform re-inspections, their responsibilities were later augmented to include initial inspections as well.

B. Enhanced I/M SIP

The Clean Air Act Amendments of 1990 require the implementation of enhanced I/M programs for areas meeting one or more of the following criteria:

- 1) Designated as a serious, severe or extreme ozone non-attainment area with urbanized populations of 200,000 or more¹;
- 2) Designated as a carbon monoxide non-attainment area that exceeded a 12.7 ppm design value with urbanized populations of 200,000 or more²; or,
- 3) Part of a Metropolitan Statistical Area with a population of 100,000 or more in the northeast Ozone Transport Region (OTR)³.

New Jersey met all three of these criteria for required implementation of an enhanced I/M program. As part of this requirement, Congress established performance specifications that were further elucidated by the USEPA. Specifically, the USEPA's promulgated rules and established guidance, including a performance standard and program administration features, for the implementation of enhanced I/M programs.

¹ 42 U.S.C.A. §7511a (c)(3).

² 42 U.S.C.A. §7512a(a)(6).

³ 42 U.S.C.A. §7511c(b)(1)(A).

The USEPA's final rule on Inspection/Maintenance Program Requirements was promulgated on November 5, 1992.⁴ Subsequently, on June 29, 1995, New Jersey submitted a SIP to the USEPA that described its enhanced I/M program design. This SIP described an inspection program whereby all 1968 and newer gasoline-fueled motor vehicles, unless specifically exempt through law or regulation, would be subject to a steady-state dynamometer-based exhaust emission test known as the ASM5015. In addition, all 1975 and newer vehicles would receive evaporative pressure and purge tests designed to detect any malfunctions with the vehicle's evaporative emission control system. All pre-1968 vehicles would continue to be subject to the idle exhaust emission test. New Jersey's enhanced I/M SIP also accounted for a hybrid (i.e., both centralized, test-only and decentralized, test-and-repair facilities) inspection network, similar to the one established for New Jersey's basic I/M program. This SIP stated that once the enhanced I/M program was fully implemented, all subject motor vehicles would be inspected at least once every two years (i.e., biennially).

C. Enhanced I/M SIP Revision - March 27, 1996

On March 27, 1996, New Jersey submitted a revision to its June 29, 1995 enhanced I/M SIP, modifying its enhanced I/M program design to take advantage of the additional flexibility afforded states by Congress in designing their enhanced I/M programs. Specifically, the National Highway System Designation Act of 1995, P.L. 104-59 [S.440], (NHSDA) prohibited the USEPA from automatically discounting decentralized program formats by 50 percent, as had previously been prescribed in the USEPA's final rule on I/M program requirements.⁵ Rather, the NHSDA allowed states to claim any reasonable amount of credit for their decentralized programs that they deemed appropriate, so long as 18 months from the approval of their enhanced I/M SIP the state could show six months of full implementation enhanced I/M program data substantiating their credit claim. Consistent therewith, as part of its March 27, 1996 enhanced I/M SIP revision, New Jersey claimed 80 percent credit for the decentralized portion of its enhanced I/M program. Refer to Section F. for more information on New Jersey's analyses to substantiate its 80 percent credit claim.

In addition to taking advantage of the flexibility afforded by the NHSDA, the March 27, 1996 enhanced I/M SIP revision modified the model year coverage of the ASM5015 exhaust emission test and evaporative system pressure and purge tests to the following: all 1981 and newer light-duty vehicles, other than low annual mileage and full-time four-wheel drive vehicles, would be subject to the steady-state dynamometer-based ASM5015 exhaust emission test, as well as evaporative system pressure and purge tests. Vehicles 1980 and older would continue to be subject to the basic idle exhaust emission test, as well as a gasoline cap pressure test for those vehicles with sealed gas cap systems.

⁴ 40 C.F.R. §51, 57 Fed. Reg. 52987 (November 5, 1992).

⁵ 40 C.F.R. §51.353, 57 Fed. Reg. 52990 (November 5, 1992).

Finally, as part of this March 27, 1996 revision to the State's enhanced I/M SIP, the test frequency of the State's current inspection process was slightly modified in connection with an enhanced demonstration phase. During this demonstration phase, vehicles that successfully passed a voluntary enhanced exhaust emission test would receive an inspection sticker valid for two years.

On May 14, 1997, the USEPA granted conditional interim approval to New Jersey's enhanced I/M SIP.⁶ This conditional interim SIP approval, which became effective on June 13, 1997, addressed both the State's original June 29, 1995 enhanced I/M SIP submittal and its subsequent March 27, 1996 SIP revision. New Jersey subsequently satisfied the conditions of this approval by rectifying the two major deficiencies in its enhanced I/M SIP identified by the USEPA (New Jersey cured the first major enhanced I/M SIP deficiency by providing final and complete test equipment specifications, test procedures and emission standards to the USEPA by January 31, 1997⁷; and cured the second major enhanced I/M SIP deficiency by providing enhanced I/M performance standard modeling to the USEPA by February 1, 1998⁸). In addition, on December 14, 1998, New Jersey cured the eight (8) de minimis deficiencies identified by the USEPA⁹, even though the satisfaction of those de minimis deficiencies had no effect on the USEPA's interim approval.¹⁰

D. Enhanced I/M SIP Revision - June 5, 1998

On June 5, 1998, New Jersey submitted a revision to its I/M SIP, clarifying the testing frequency during the transition between the basic I/M program and the full implementation of the enhanced I/M program. Although the previous SIP revisions clearly define the testing frequency of both New Jersey's basic and enhanced I/M programs, they did not definitively specify the testing frequency during the transition

⁶ 40 C.F.R. 52, 62 Fed. Reg. 26401 (May 14, 1997).

⁷ These documents were submitted as an attachment to a letter dated January 31, 1997 from Commissioner Robert C. Shinn, Jr., New Jersey Department of Environmental Protection, to Jeanne M. Fox, Regional Administrator, USEPA, Region II.

⁸ This modeling and its supporting documentation were submitted as an attachment to a letter dated January 30, 1998 from Commissioner Robert C. Shinn, Jr., New Jersey Department of Environmental Protection to William J. Muszynski, P.E., Deputy Regional Administrator, USEPA, Region II.

⁹ The State of New Jersey Department of Environmental Protection, Revision to the State Implementation Plan (SIP) for the Inspection and Maintenance (I/M) Program for the State of New Jersey, December 14, 1998.

¹⁰ 61 Fed. Reg. 56172, (October 31, 1996).

period between the two programs.

As part of the June 5, 1998 SIP revision, the State determined that during the transition period, the basic I/M program would continue to operate, but on a biennial, rather than annual, test frequency. This was done to accommodate the decreased availability of centralized inspection lanes while they were being retrofitted for enhanced testing. To make this modification to the basic I/M program's test frequency, this SIP revision quantified the emission reduction losses anticipated from this modification and provided an equivalency demonstration showing the State's plan to offset those losses in emission reduction benefit. Specifically, to compensate for the loss in VOC emission reduction benefit from modifying the basic I/M program's test frequency, New Jersey: 1) began administering fuel cap pressure tests as part of its basic I/M program in its centralized inspection facilities, and 2) began fuel cap/evaporative emission control system visual inspections as part of its basic I/M program in its decentralized inspection facilities. The loss in carbon monoxide emission reduction benefit from modifying the basic I/M program's test frequency was offset by taking credit for emission reduction benefits gained through vehicle fleet turnover which had not already been claimed by the State in its carbon monoxide SIP.¹¹ Vehicle fleet turnover results when newer vehicles with more advanced emission controls replace older, less advanced vehicles within the State vehicle population. The State submitted modeling analyses showing that both of the above strategies more than compensated for the loss in VOC and carbon monoxide emission reduction benefits from modifying the basic I/M program's test frequency. The USEPA approved the State's June 5, 1998 revision to its enhanced I/M SIP on August 26, 1998.¹²

E. Proposed Enhanced I/M SIP Revision - June 9, 2001

On June 9, 2001, the State proposed to revise its enhanced I/M SIP to include amendments to the NJMVC's rules governing the implementation and operation of the State's I/M program. The proposed rulemaking¹³ made the following changes to the NJMVC's I/M regulations that could impact the air quality benefits associated with the enhanced I/M program, and therefore impact the SIP:

¹¹ The New Jersey State Implementation Plan (SIP) Revision for the Attainment and Maintenance of the Carbon Monoxide National Ambient Air Quality Standard, November 17, 1994. The State, on July 10, 1997, proposed a revision to this SIP. A hearing on this proposal took place on August 11, 1997 and the comment period closed on August 20, 1997. This SIP revision was submitted to the USEPA on August 7, 1998. To date, the USEPA has taken no action on New Jersey's submittal.

¹² 63 Fed. Reg. 45402 (August 26, 1998).

¹³ 33 N.J.R. 1894(a) (June 4, 2001).

- Provide that if leasing companies and out-of-state new motor vehicle dealerships inspect a new motor vehicle's safety and emission control devices to insure that they conform to the specifications established by the manufacturer and contained in the pre-delivery checklist, those facilities could issue a temporary inspection decal. This decal allows the motorist to present the vehicle at the exit end of any CIF and be issued a two-year inspection decal. This regulatory change gives these leasing companies and out-of-state new motor vehicle dealerships equivalent privileges to those previously given to in-state new motor vehicle dealerships;
- Exempt gasoline-fueled school buses which are subject to inspection by the NJMVC's School Bus Inspection Unit from the inspection requirements of the enhanced I/M program;
- Allow any motor vehicle that passes an on-road inspection within the two-month period prior to its regularly scheduled biennial inspection to use the on-road inspection result in lieu of the complete biennial inspection, so long as the tests performed on-road are the same tests that would be performed on the vehicle as part of the biennial inspection process;
- Exempt from dynamometer testing any motor vehicle " with a chassis height that has been modified so as to make its operation on a dynamometer either impractical or hazardous, as will be determined in the discretion of the Director [of the NJMVC]"; and,
- Change the minimum cost expenditure value needed for the issuance of a cost waiver from \$200 to \$450 as of January 1, 2002.

A hearing on this proposed SIP revision, as well as the NJMVC's proposed rulemaking, was held on July 9, 2001. The NJMVC subsequently adopted its regulations on October 15, 2001.¹⁴

F. Enhanced I/M SIP Revision - August 31, 2001

On December 13, 2000, in compliance with its NHSDA credit claim, New Jersey submitted to the USEPA a qualitative analysis of four months of data showing the effectiveness of the decentralized portion of its enhanced I/M program relative to its centralized test-only network.¹⁵ Subsequently, on May 4, 2001, New Jersey proposed its final report for NHSDA compliance, which evaluated six full months of program implementation data (the period from July 1, 2000 through December 31, 2000) using various analysis methodologies. On August 31, 2001¹⁶, the State of New Jersey

¹⁴ 33 N.J.R. 3651(b) (October 15, 2001).

¹⁵ The State of New Jersey Department of Environmental Protection, Report on the Inspection and Maintenance (I/M) Program for the State of New Jersey, National Highway Systems Designation Act (NHSDA) Submittal, December 13, 2000.

¹⁶ Although this document was submitted to the USEPA on August 31, 2001, the date on the SIP submittal document is August 20, 2001.

submitted to the USEPA a revision to its enhanced I/M SIP that included:

- 1) The State's final submittal for compliance with the National Highway Systems Designation Act (NHSDA); and,
- 2) A revision to New Jersey's enhanced I/M performance standard modeling.

The first part of this SIP revision included New Jersey's final NHSDA report. This report was designed to support the claim New Jersey made in its March 27, 1996 enhanced I/M SIP revision that its decentralized network (the private inspection facilities, or PIFs) is at least 80 percent as effective as its centralized network (the centralized inspection facilities, or CIFs). The NHSDA report showed that both New Jersey's centralized test-only and decentralized test-and-repair program networks are effectively identifying vehicles with unacceptably high levels of emissions, and that the State-registered Emission Repair Facilities (ERFs) are significantly reducing vehicle emissions through effective repairs. Specifically, the NHSDA analyses show overall emission reductions of 55 percent for hydrocarbons (HC), 58 percent for nitrogen oxide (NO) and 84 percent for carbon monoxide from the vehicles repaired and successfully passing re-inspections following initial inspection failures. These analyses show relatively uniform emission reductions attributable to both network types of New Jersey's enhanced I/M program, indicating that the emission reductions attributable to the PIFs are at least 80 percent of those attributed to the CIF network. In fact, the analyses show that the State was conservative in this original credit estimation.

The second part of the August 20, 2001 enhanced I/M SIP revision addressed the State's performance standard modeling for its enhanced I/M program. The State originally submitted its performance standard modeling to the USEPA on January 30, 1998, to satisfy a condition of the USEPA's conditional interim approval of New Jersey's enhanced I/M program SIP.¹⁷ At that time, the State had not yet implemented its enhanced I/M program, requiring the NJDEP to make certain assumptions about the program, such as the expected date for the implementation of final standards. After the State successfully implemented its enhanced I/M program, the USEPA requested that the State update its performance standard modeling to more accurately reflect the program as implemented. The August 20, 2001 revised performance standard modeling demonstrated that for an evaluation year of 2002, the State exceeded the applicable enhanced performance standard.

On September 11, 2001, the USEPA proposed to: 1) approve New Jersey's August 20, 2001 SIP revision; and, 2) give final approval to New Jersey's overall enhanced I/M SIP. Prior to this, the State's enhanced I/M SIP had interim approval from the USEPA. On January 22, 2002, the USEPA finalized its approval of New Jersey's August 20, 2001 SIP revision and gave final approval to New Jersey's overall enhanced I/M SIP.¹⁸

¹⁷ 40 C.F.R. 52, 62 Fed. Reg. 26401 (May 14, 1997).

¹⁸ 67 Fed. Reg. 2811 (January 22, 2002).

G. Proposed Enhanced I/M SIP Revision - December 31, 2001

On December 31, 2001, the State of New Jersey submitted a proposed revision to its enhanced I/M SIP to the USEPA.¹⁹ This proposed revision included the following:

- 1) A formal request to defer of the mandatory implementation date for inclusion of On-Board Diagnostic (OBD) inspections into the State's I/M program from January 1, 2002 to January 1, 2003;
- 2) A formal request that the State be allowed to phase-in the mandatory OBD inspection portion of its I/M program;
- 3) Submittal, for inclusion as part of the overall enhanced I/M SIP, of those proposed amendments to the Department of Environmental Protection's (NJDEP) rules which establish the necessary test procedures and standards for implementation of an enhanced I/M program for gasoline-fueled motor vehicles in New Jersey; and,
- 4) Submittal, for inclusion as part of the overall enhanced I/M SIP, of those emission-related portions of the NJMVC-proposed amendments to its rules governing school bus inspections in New Jersey.²⁰

The proposed NJDEP regulatory amendments were attached as Appendix I to the December 31, 2001 proposed SIP submittal and proposed the following major modifications to N.J.A.C. 7:27-15 (Control and Prohibition of 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):

- Modify the framework, procedures and testing schedule by which 1996 and newer model year vehicles will be subject to OBD inspections;
- Extend the end date for the current initial ASM5015 standards for all 1981 and newer light duty gasoline vehicles (LDGVs), light duty gasoline trucks 1 and 2 (LDGT1s and LDGT2s)²¹ from December 31, 2001 to December 31, 2002;

¹⁹ Submitted December 31, 2001 under cover letter from then NJDEP Commissioner Robert C. Shinn, Jr. to Jane M. Kenny, Regional Administrator, USEPA Region II.

²⁰ Please note that the NJDMV's school bus rule proposal was forwarded to the USEPA under separate cover from the original proposed SIP revision. Specifically, this proposal was forwarded on March 26, 2001 from Chris Salmi, Manager of the Bureau of Air Quality Planning in the NJDEP to Raymond Werner, Chief of the Air Programs Branch, USEPA - Region II.

²¹ To determine whether a vehicle is classified as a LDGV, LDGT1, LDGT2 or HDGV please refer to the definition section of the NJDEP's rules at N.J.A.C. 7:27-15.1.

- Replace the final standards for the ASM5015 exhaust emission test for all model year 1994 and newer Tier I light-duty gasoline-fueled trucks 1 and 2 (LDGT1 and LDGT2s), currently scheduled for implementation on January 1, 2002, with new "interim" standards that will go into effect on January 1, 2003;
- Replace the final standards for the ASM5015 exhaust emission test for all pre-1996 non-Tier I LDGT1s and LDGT2s, and for all 1981 and newer light-duty gasoline-fueled vehicles (LDGVs) with the current initial ASM5015 standards for those vehicles, and change the implementation date from January 1, 2002 to January 1, 2003;
- Remove all references to the evaporative pressure and purge tests, and;
- Change the test procedure requirements for those gasoline-fueled motor vehicles registered as school buses by the NJMVC, and subject to inspection by the NJMVC's School Bus Inspection Unit.

A hearing on the proposed SIP revision, as well as both NJDEP and NJMVC's proposed rulemakings, was held on February 25, 2002. The State received significant comments on two aspects of its January 22, 2002 proposal; the implementation plan for integrating mandatory OBD inspections, and the implementation of interim standards for the ASM5015 exhaust emissions test to replace the current final standards.

In addition to considering the comments, the NJDEP also took into account other factors with regard to OBD implementation, such as the determination that implementation of the USEPA's original OBD inspection component design without "second chance" testing would impose less of a 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 re-inspection. After evaluating all of these issues, the State determined not to adopt the proposed OBD implementation plan or the interim standards for ASM5015 exhaust emission test. Although the State considered adopting the remaining changes proposed in its January 22, 2002 proposal, it determined that it would be clearer to the public if the NJDEP developed a new proposal that included the State's revised OBD implementation plan, and provided for continuation of the initial ASM standards without the implementation of final standards. As such, the NJDEP determined not to adopt its January 22, 2002 rule proposal and, on April 22, 2002²², the NJDEP submitted a SIP revision that took the following action with regard to the State's enhanced I/M program:

- 1) Withdrew the State's request to phase-in OBD inspections into New Jersey's enhanced I/M program;
- 2) Withdrew the State's submittal of the January 22, 2002 NJDEP rule proposal, and;

²² The State of New Jersey Department of Environmental Protection, Enhanced Inspection and Maintenance (I/M) Program for the State of New Jersey, Request to Defer the Integration of On-Board Diagnostic (OBD) Inspections into the State's I/M Program, SIP Revision, April 22, 2002.

3)Submitted a final SIP revision requesting a deferral of the mandatory implementation date for inclusion of OBD inspections into the State I/M program from January 1, 2002 to January 1, 2003. This request included a commitment to modify the rule date for OBD inspection.

In the letter transmitting this SIP revision to the USEPA, the State indicated that, should the NJMVC act to adopt its latest school bus rule proposal, the NJDEP would then submit to the USEPA for their review and approval, a final SIP revision that includes that adoption, as well as the NJMVC's previous rule adoption which removed from the I/M program those gasoline-fueled vehicles registered as school buses, and thus subject to inspection by the NJMVC's school bus inspection unit, from the enhanced I/M program requirements. This second rule adoption was submitted to the USEPA as a proposed SIP revision on June 9, 2001 and the adoption appeared in the October 15, 2001 edition of the New Jersey Register.

H. Proposed Enhanced I/M SIP Revision - April 24, 2002

On April 24, 2002, the NJDEP submitted a revision to its enhanced I/M SIP that consisted of proposed amendments to the NJDEP rules governing the implementation of the enhanced I/M program in New Jersey. Specifically, the NJDEP's rule proposal made the following major changes to the State's enhanced I/M program:

- Modified the framework, procedures and testing schedule by which model year 1996 and newer vehicles would be subject to on-board diagnostic (OBD) inspections. The proposed program modifications included changing the start date for mandatory OBD inspections (pass/fail determinations) from January 1, 2001, to June 1, 2003. The proposal set forth the testing protocols for OBD inspections on 1996 and newer vehicles;
- Eliminated the end date for the use of the "initial" emission standards for the ASM5015 exhaust emission test. This would allow for the continued use of these initial standards;
- Removed the "final" emission standards for the ASM5015 exhaust emission test²³;
- Removed all references to the evaporative pressure and purge tests while retaining the evaporative fuel cap (or gas cap) leak test; and;
- Exempted from dynamometer testing those pre-1996 light-duty vehicles that are registered as school buses and that are under the jurisdiction of the NJMVC's

²³ Although the NJDEP proposed the elimination of the final standards for dynamometer testing, the basis and background document for the proposal discusses the USEPA's intention to finalize a comprehensive set of revised final standards for the ASM5015 test, and the State's determination to consider including those final standards as part of its enhanced I/M program, once they are made available.

School Bus Inspection Unit. 1996 and newer light-duty vehicles registered as school buses would receive an OBD inspection.

A hearing on the NJDEP's new proposal, and the associated proposed SIP revision, was held on June 24, 2002 and the comment period ended on July 30, 2002. On December 15, 2003 (68 Fed. Reg. 69640), the USEPA proposed approval of this revision to New Jersey's enhanced I/M SIP. USEPA gave final approval of this revision on May 21, 2004 (69 Fed. Reg. 29234).

I. Revised Performance Standard Modeling SIP Revision - November 27, 2002

On November 27, 2002, the NJDEP submitted a revision to New Jersey's enhanced Inspection and Maintenance (I/M) program State Implementation Plan (SIP) which contained a revision to New Jersey's enhanced I/M performance standard modeling. The primary reason for this revised performance standard modeling was to satisfy the USEPA's requirements for securing their approval for the State to extend the new vehicle emission inspection exemption from one inspection cycle (i.e., 2 years) to two inspection cycles (i.e., 4 years). Governor James E. McGreevey enacted this new car emission inspection exemption on July 1, 2002, however, implementation of this exemption was contingent on USEPA approval.

In addition to the extension to the new car emission inspection exemption, New Jersey proposed several modifications to its enhanced I/M program design since the State's previous performance standard submittal on August 20, 2001. These proposed changes would impact the effectiveness of the overall I/M program. Specifically, the NJDEP proposed the following changes to its enhanced I/M regulations in the May 20, 2002 New Jersey Register (N.J.R.):

- Modified the framework, procedures and testing schedule by which model year 1996 and newer vehicles would be subject to on-board diagnostic (OBD) inspections. The proposed program modifications included changing the start date for mandatory OBD inspections (pass/fail determinations) from January 1, 2001, to June 1, 2003 and set forth the testing protocols for OBD inspections on 1996 and newer vehicles;
- Eliminated the end date for the use of the "initial" emission standards for the ASM5015 exhaust emission test to allow for the continued use of these initial standards;
- Removed the "final" emission standards for the ASM5015 exhaust emission test;
- Removed all references to the evaporative pressure and purge tests while retaining the evaporative fuel cap (or gas cap) leak test; and,
- Exempted from dynamometer testing those pre-1996 light-duty vehicles that are registered as school buses and that are under the jurisdiction of the NJDMV's School Bus Inspection Unit. 1996 and newer light-duty vehicles registered as school buses would receive an OBD inspection.

The NJDEP's November 27, 2002 revision revised the State's enhanced I/M performance standard modeling to account for the four-year new car exemption, as well as the NJDEP's May 20, 2002 proposed rule changes. This revision showed that for the evaluation years 2002, 2005 and 2007, the State's I/M program meets the low enhanced performance standard. On November 5, 2002 (67 Fed. Reg. 67345), the USEPA proposed approval of this revision to New Jersey's enhanced I/M SIP. The USEPA gave this revision final approval on February 18, 2003 (68 Fed. Reg. 7704).

J I/M Program Changes SIP Revision - December 15, 2009

On December 15, 2009 the NJDEP submitted a revision to New Jersey's enhanced I/M program SIP which contained I/M program modeling, including USEPA performance standard modeling, that demonstrated the emissions impacts due to a number of proposed program changes. Specifically, this SIP revision reflected the adopted new rules and rule amendments to the NJDEP's rules at N.J.A.C. 7:27-14, 7:27-15, 7:27B-4 and 7:27B-5 and the Motor Vehicle Commission (MVC) rules at N.J.A.C. 13:20-7, 13:20-24, 13:20-26, 13:20-28, 13:20-29, 13:20-30, 13:20-32, 13:20-33, 13:20-43, 13:20-44, 13:20-45, 13:20-46, 13:20-47, 13:20-48, and 13:21-15. The program changes included the following:

- Emission tests will no longer require the use of a dynamometer. Emission tests will include On-Board Diagnostics (OBD), gas cap, visible smoke and two-speed idle tailpipe tests. The two-speed idle test replaces both the ASM5015 and 2500 RPM tests.
- Repair cost waiver provisions are removed.
- Gas cap testing is excluded for vehicles of model year 2001 and newer because the OBD testing addresses this concern.
- Certain classes of commercial vehicles, limousines, taxis and jitneys will require annual (more frequent) inspection.
- Light duty diesel vehicles will now be subject to emission testing.

This SIP revision consisted of the NJDEP rule changes, the MVC rule changes, and an analysis showing the emissions impact of the changes to the program. This analysis evaluated the emission impacts of the enhanced I/M program changes by comparing emission factors for the existing and proposed programs. The results indicated that the changes to the enhanced I/M program do not compromise the State's efforts to meet and/or maintain National Ambient Air Quality Standards for ozone or carbon monoxide. Also, the new program meets the USEPA low enhanced performance standard.

K I/M Program Changes SIP Revision Supplement - Extension of the New Vehicle Inspection Exemption From 4 Years to 5 Years - July 8, 2010

On July 8, 2010 New Jersey submitted a SIP revision as a supplement to the I/M SIP revision submitted in December of 2009. This SIP revision provided documentation on the emission impacts that would result from changes to New Jersey's vehicle inspection program extending the new vehicle inspection exemption from four years to five years. This SIP revision included a demonstration that New Jersey's decentralized I/M network (the private inspection facilities, or PIFs) is currently 96 percent as effective as New Jersey's centralized I/M network (the centralized inspection facilities, or CIFs). This analysis demonstrated that the proposed changes to the enhanced I/M program do not compromise the State's efforts to meet and/or maintain National Ambient Air Quality Standards for ozone or carbon monoxide.

This SIP revision evaluated the emission impacts of the enhanced I/M program changes by comparing emission factors calculated using the USEPA MOBILE6 model for the existing and new programs. The model results indicated that there was no difference between emission factors for the existing and new enhanced I/M programs for ozone precursors (VOCs and NOx). The new enhanced I/M program provided a small but insignificant increase in the predicted carbon monoxide emission factor relative to the existing program. This SIP demonstrated that the proposed changes to the I/M program did not compromise the State's efforts to meet and/or maintain National Ambient Air Quality Standards (NAAQSs) for ozone or carbon monoxide.

This SIP revision also revised the State's enhanced I/M performance standard modeling to account for the I/M program changes. This revision shows that the State's new enhanced I/M program continues to meet the USEPA low enhanced performance standard.

The USEPA gave final approval to the 2009 and 2010 SIP revisions on March 15, 2012 (77 Fed. Reg. 15263).

