

**STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES**

NOTICE OF PUBLIC COMMENT PERIOD

**State Implementation Plan (SIP) updates to the current Rhode Island Motor Vehicle
Inspection and Maintenance Program**

The Rhode Island Department of Environmental Management (DEM) Office of Air Resources proposes to revise the State Implementation Plan (SIP) for the current Rhode Island Motor Vehicle Inspection and Maintenance Program and gives notice of intent to receive public comment on the update and to afford interested parties an opportunity to submit data, views, or arguments in writing on the proposed SIP revision. A public hearing on the proposed SIP revision will be held if DEM receives a request from the public. If a public hearing is held, a notice will be published announcing the date, time, and place of such hearing.

The Rhode Island Inspection and Maintenance Program was changed from an IM240 emissions testing method to an onboard diagnostic testing only method in 2018. This SIP revision includes the modeling and analysis used to support the changes to the emissions testing program. The modeling indicates the changes to the program have no significant effect on volatile organic compound and nitrous oxide emissions from motor vehicles subject to the RI I/M Program. There are no new requirements being proposed in this SIP revision. Copies of the proposed SIP revision documents are available on the Department's website from the Office of Air Resources homepage under the State Implementation Plan (SIP) quick link ([RIDEM State Implementation Plans Open for Public Comment](#)).

Copies are also available at DEM's Office of Air Resources 235 Promenade St., Providence, RI. Any additional requests can be made by contacting the Office of Air Resources at 401-222-2808, weekdays, 8:30 a.m. - 4:00 p.m.

DEM encourages the submission of written comments. Written comments, to be considered part of the administrative record must be submitted during the public comment period. Written comments may be mailed or e-mailed to the Office of Air Resources and received no later than 4:00 p.m., May 5, 2023, at which time the public comment period will close. The mailing address for comments is:

Owen Jackson, Senior Air Quality Specialist
Department of Environmental Management
Office of Air Resources
235 Promenade Street
Providence, RI 02908-5767

The e-mail address for comments is: owen.jackson@dem.ri.gov

Signed the 4th day of April 2023

Karen Slattery

Karen Slattery, Deputy Administrator
Office of Air Resources

**The Rhode Island Motor
Vehicle
Inspection/Maintenance
Program**

SIP Revision

April 2023

Table of Contents

Executive Summary	3
Introduction.....	4
1.0 Applicability (§51.350).....	4
2.0 Enhanced I/M Performance Standard (§51.351)	4
3.0 Network Type and Program Evaluation (§51.353).....	65
4.0 Adequate Tools and Resources (§51.354)	6
5.0 Test Frequency and Convenience (§51.355)	7
6.0 Vehicle Coverage (§51.356).....	87
7.0 Test Procedure and Standards (§51.357)	8
8.0 Test Equipment (§51.358)	98
9.0 Quality Control (§51.359).....	98
10.0 Waivers and Compliance via Diagnostic Inspection (§51.360).....	109
11.0 Motorist Compliance Enforcement (§51.361)	1140
12.0 Motorist Compliance Enforcement Program Oversight (§51.362).....	1244
13.0 Quality Assurance (§51.363)	1244
14.0 Enforcement Against Contractors, Stations, and Inspectors (§51.364).....	1342
15.0 Data Collection (§51.365).....	1443
16.0 Data Analysis and Reporting (§51.366).....	14
17.0 Inspector Training and Licensing or Certification (§51.367).....	1544
18.0 Public Information and Consumer Protection (§51.368).....	1544
19.0 Improving Repair Effectiveness (§51.369).....	1645
20.0 Compliance with Recall Notices (§51.370)	1645
21.0 On-Road Testing (§51.371)	1645
22.0 State Implementation Plan Submissions (§51.372)	1746
23.0 Implementation Deadlines (§51.373).....	1746

Appendices

- Appendix A: Air Pollution Control Regulation No. 34 Rhode Island Motor Vehicle Inspection/Maintenance Program; Rhode Island Motor Vehicle Safety and Emissions Control Regulation No. 1
- Appendix B: List of Authorized Inspection Repair Stations (AIRS)
- Appendix C: Rhode Island DMV Official Manual for Vehicle Inspection
- Appendix D: RI MOVES3 Analysis

Executive Summary

The State Implementation Plan (SIP) revision is required under the Clean Air Act Amendments of 1990 and federal regulations, 42 United State Code Section 7511a, section 182 (c)(3)(A) and ensures changes to Rhode Island's Inspection and Maintenance (I/M) program are fully documented. The structure of this document is consistent with the requirements that have been established by the United States Environmental Protection Agency (EPA) for I/M programs. The I/M Program, designed to identify vehicles that emit pollutants that exceed acceptable standards and require such vehicles to get repaired is an important strategy that Rhode Island implements to reduce and maintain measured air quality for the National Ambient Air Quality Standard (NAAQS) for ozone.

Rhode Island's I/M Program was last updated in 2018. The most significant change to the I/M Program was the removal of the dynamometer and two-speed idle test for vehicles that are unable to complete an on-board diagnostic (OBD) check. As a result of removing these tests, Rhode Island's I/M Program relies on OBD checks to maintain emission standards for light duty vehicles. Other program changes include a new computer system used to send reminders of upcoming inspections and changes to the allocation of inspection fees. This SIP revision is based on amendments to Rhode Island's Inspection and Maintenance Program.

Introduction

This document outlines the Rhode Island I/M Program with each section providing the details and specific elements of the program, including citations to the statutory and regulatory authority to conduct these specific elements.

Rhode Island is required to adopt and implement an enhanced inspection and maintenance (I/M) program, pursuant to 42 United States Code section 7511a, section 182(c)(3)(A) of the Clean Air Act Amendments of 1990. The Rhode Island Motor Vehicle I/M Program was implemented in January of 2000. The newest changes to Rhode Island's Motor Vehicle I/M Program include revisions to the inspection fee allocation, the removal of dynamometer and two-speed idle testing, and a new computer system to track vehicle inspections. This SIP revision is being submitted in accordance with 40 Code of Federal Regulations (CFR), Part 51, Subpart S.

The State of Rhode Island's Inspection Agreement designates OPUS Inspection as the Program Manager through 2025. This contract (Inspection Agreement) stipulates, among other things, that the contractor must provide the capacity to test all light-duty vehicles and light-duty trucks 8,500 pounds gross vehicle weight rating (GVWR) and under.¹

1.0 Applicability (§51.350)

Rhode Island's legal authority to establish and implement an I/M program is included in Appendix A. The Rhode Island Department of Environmental Management (DEM) and the Rhode Island Department of Motor Vehicles (DMV) are jointly responsible for the operation of the program and have adopted regulations for the I/M program. DMV regulations govern the day-to-day administrative and enforcement operation of the I/M Program; the DEM regulations establish the ability for the Department to supervise the operational aspects of the program and establish appropriate emission standards.²

2.0 Enhanced I/M Performance Standard (§51.351)

Rhode Island's I/M Program meets the emissions reductions required by EPA under the Enhanced Performance Standard for areas classified under the 8-hour ozone standard. The table below estimates oxides of nitrogen (NOx) and volatile organic compounds (VOC) from the Enhanced Performance Standard, Rhode Island's EPA approved I/M Program, and Rhode Island's current I/M Program.

Rhode Island used EPA's MOVES3 to model the impact of the I/M Program and the Enhanced Performance Standard. Providence County was chosen as a representative county for all modeling because it is home to over half of Rhode Island's population and has a higher population density than any other county in Rhode Island. Runs were modeled using July weekdays (24-hour day) as recommended by EPA. Modeling

¹ Motor Vehicle Inspection and Maintenance Program Services Agreement between the State of Rhode Island Department of Administration and OPUS Technologies.

² See Appendix A.

recommendations were followed using the guidance provided in Office of Transportation and Air Quality’s (OTAQ) document “Performance Standard Modeling for New and Existing Vehicle Inspection and Maintenance (I/M) Programs Using the MOVES Mobile Source Emissions Model” released in October 2022.

Three different model runs were completed for the years 2020, 2023, and 2026. The first run modeled Rhode Island’s EPA approved I/M program for 2020 NOx and VOC emissions rates. All gasoline or diesel-powered light-duty vehicles and trucks 25 years and newer and 8,500 pounds gross vehicle weight rating (GVWR) and under are subject to Rhode Island’s EPA approved I/M Program. Vehicles older than MY1996 undergo an I/M 240 test and all vehicles MY1996 and newer undergo an OBD check. For 2023 and 2026 model runs, I/M 240 tests would not be required under the approved program as the approved I/M program only applies to vehicles 25 years and newer. The I/M 240 tests were phased out as of 2021 because vehicles pre-MY1996 are older than 25 years. For this reason, the approved I/M Program was only modeled for 2020 because 2023 and 2026 would yield the same emissions rates as the current I/M Program using OBD only.

The second run modeled emissions rates from Rhode Island’s current I/M Program (OBD only) for 2020, 2023, and 2026. In the current program all light duty vehicles 25 years and newer are subject to an OBD test only. The third run modeled emissions rates using EPA’s Enhanced Performance Standard for 2020, 2023 and 2026.

2020 Providence County inputs were used for the 2020, 2023, and 2026 model runs. The guidance document recommends using the same inputs for different years to isolate changes in emissions between the I/M programs. The approved I/M input for the 2020 MOVES run requires MY1995 vehicles to undergo a biennial I/M 240 test and all other vehicles to undergo a biennial OBD check. Rhode Island’s current I/M input represents the I/M Program requiring biennial OBD checks for all vehicles 25 years and newer. In the EPA approved and current I/M Program, vehicles less than two years old are exempt from emission testing. The Enhanced Performance Standard I/M input was copied directly from OTAQ’s document. All inputs were developed using Rhode Island data except VMTfraction and Avgspeeddistribution; Rhode Island relied on default data provided by the MOVES model for vehicle miles traveled fractions and speed inputs.

I/M Program	Year	NOx (g/mi)	VOC (g/mi)
Rhode Island OBD and IM240 (Approved I/M Program)	2020	0.501	0.282
Rhode Island OBD Only		0.502	0.282
Enhanced Performance Standard with 0.02 g/mi buffer		0.523	0.298
Rhode Island OBD Only	2023	0.392	0.240
Enhanced Performance Standard with 0.02 g/mi buffer		0.410	0.254
Rhode Island OBD Only	2026	0.308	0.193
Enhanced Performance Standard with 0.02 g/mi buffer		0.327	0.209

The SQL script “EmissionRates.sql” in the post processing menu on MOVES3 allows the emissions quantified output to be converted into grams per mile. The modeling results in the table below defends Rhode Island’s I/M Program changes. The program will not result in an increase in emissions compared to the Enhanced Performance Standard and meets the level of emission reductions required for areas designated under the 8-hour ozone standard. The buffer of 0.02 grams per mile is included in the Enhanced Performance Standard output consistent with OTAQ’s guidance.³

3.0 Network Type and Program Evaluation (§51.353)

Rhode Island has maintained a decentralized test and repair program since January 2000. The decentralized infrastructure meets I/M requirements, including the OBDII testing requirements. The State entered into an inspection agreement with Applus Technologies (1999-2006), SysTech International, LLC (2007-2014), OPUS Inspection (2015-2016), OPUS Inspection (2017), and the current program manager OPUS Inspection (2018-2025) to oversee the program operation. The contract (Inspection and Maintenance Program Services Agreement) requires a Vehicle Inspection Database (VID) on the program manager’s premises to evaluate the daily inspection operations of approximately 346 Authorized Inspection and Repair Stations (AIRS) located throughout the state.⁴

4.0 Adequate Tools and Resources (§51.354)

Rhode Island collects adequate fees to support the I/M Program according to 40 CFR 51.354. The Rhode Island safety and emissions inspection fee is currently set at fifty-five (55) dollars with an inspection required every two years.⁵

The fee structure adequately provides the resources needed for program administration, quality control, quality assurance, data analysis and reporting. The fee is distributed as follows:

	Fee Distribution
Authorized Inspection Repair Station (AIRS)	\$19.00
Rhode Island General Fund	\$35.50
Program Manager Administration	\$0.50
Total	\$55.00

The Rhode Island I/M Program is funded through part of the vehicle inspection fee. The fee structure was last changed with the new contract in 2018. Thirty-five dollars and fifty cents (\$35.50) of the fee is deposited into a restricted receipt account within the State’s General Fund. The restricted receipt account has been established to offset the costs of

³ <http://www.epa.gov/movesepsmodeling>

⁴ Motor Vehicle Inspection and Maintenance Program Services Agreement between the State of Rhode Island Department of Administration and OPUS Technologies.

⁵ Motor Vehicle Inspection and Maintenance Program Services Agreement between the State of Rhode Island Department of Administration and OPUS Technologies.

administering the activities of the Department of Administration’s Division of Motor Vehicles and the Department of Environmental Management’s Office of Air Resources. The Program Manager receives a portion of the inspection fee (\$0.50) for the support services and equipment provided. The AIRS retain a portion of the inspection fee (\$19.00) for the labor required to inspect vehicles. There is no fee charged for the first re-inspection of a vehicle that failed an initial inspection when the re-inspection is conducted within 30 days at the same AIRS that conducted the initial inspection.

Rhode Island commits to maintaining an adequate staff dedicated to overt and covert auditing, data analysis, program administration, enforcement, and the other necessary program functions.

The Department of Environmental Management continues to support the I/M program beyond that provided by the Program Manager and DMV. An Air Quality Specialist in the Office of Air Resources continues to act as DEM 's liaison to the I/M Program on a part-time basis. The following table describes the work of DEM personnel devoted to the I/M Program.

Title	Duties	Time
Air Quality Specialist	<ul style="list-style-type: none"> - Liaison with Program Manager and DMV twice monthly - Creation of reports for EPA, DEM, and general distribution - Regional and national contact person for I/M program - Monitor I/M program adherence to Air Pollution Control Part 34 and federal regulations 	60%
Supervising Air Quality Specialist	- Supervision	15%
Administrator of Air Resources	- Supervision	5%

5.0 Test Frequency and Convenience (§51.355)

Rhode Island will continue to maintain the enhanced inspection and maintenance program statewide. A biennial emissions test is required for all gasoline and diesel-powered light duty vehicles and light duty trucks. Vehicles 25 years and newer, rated up to 8,500 pounds gross vehicle weight rating (GVWR) are subject to a biennial OBD inspection, except any new motor vehicle until twenty-four (24) months after its date of initial purchase or 24,000 miles, whichever occurs first.⁶ Vehicles 25 years of age or older are required to undergo an emissions component check; however, the results relating to emissions are advisory and compliance with the standards are voluntary. All light duty vehicles are required to undergo a biennial safety inspection.

⁶ See Appendix A.

Inspections are required prior to the expiration of a vehicle's existing inspection sticker. A sticker is placed on the light duty vehicle after a passing inspection and the sticker includes the month and year in which the vehicle must be reinspected.

The number of AIRS has increased from 291 stations in 2017 to 346 stations in 2021. To assure motorist's convenience, a minimum of one AIRS location is required in each city or town in Rhode Island.⁷

6.0 Vehicle Coverage (§51.356)

All gasoline and diesel-powered light duty vehicles and light duty trucks 25 years old and newer and up to 8,500 pounds GVWR are subject to a biennial OBD inspection. New motor vehicles are exempt from emissions testing until twenty-four (24) months after the date of initial purchase or 24,000 miles, whichever occurs first. All vehicles must undergo a visual emissions inspection; however, compliance with the visual inspection is voluntary. All vehicles are required to undergo a biennial safety inspection at the time of the emissions inspection.

7.0 Test Procedure and Standards (§51.357)

OBD testing meets the procedural requirements set forth in 40 CFR 85.222. The DMV Safety and Emissions Control Regulation No. 1 and the DMV Motor Vehicle Inspection Manual are referenced to guide operational procedures.

All motor vehicles must undergo a biennial safety inspection. Safety inspections include a thorough inspection of the lights, body integrity, braking system, exhaust system, fuel leaks, glass, horn, mirrors, seats and seat belts, windshield wipers, steering, steering alignment and suspension, springs, tires, and wheels. Complete safety inspection requirements are described in the DMV's Official Manual for Vehicle Inspection.

Rhode Island vehicles are tested for emissions using one of two methods: on-board diagnostic (OBD) testing for all OBD equipped vehicles (MY1996 and newer) or a visual emission component check for all vehicles pre-MY1996 or vehicles without OBD. Compliance with the visual emission component check is voluntary. Vehicles that fail OBD testing must be retested after completing any needed repairs.

An OBD system test is an inquiry of the vehicle's on-board computer. An OBD test is considered a failure when:

- Current Diagnostic Trouble Codes are indicated, and the Malfunction Indicator Light (MIL) is commanded-on or,
- MY2001 and newer vehicles, more than one monitor in a vehicle's on-board computer is not set as ready; or,

⁷ See Appendix A, Section 1.2. "Rhode Island Motor Vehicle Safety and Emissions Control Regulation No.1."

- MY1996-2000 vehicles, more than two monitors in a vehicle's on-board computer are not set as ready.⁸

8.0 Test Equipment (§51.358)

Test equipment standards are included in the contract and meet the requirements of OBD testing. The I/M contract requires written test equipment specifications. The RI2018 AIRS Analyzer System includes the following test equipment: a cabinet, a computer, peripherals, an OBD tool, a barcode scanner, a sticker printer, a laser printer for documents, a fingerprint reader for inspector authentication, two web cameras, and a hand-held camera.⁹

9.0 Quality Control (§51.359)

Rhode Island has taken all steps necessary to meet the applicable I/M performance standard while ensuring motorists receive consistent and accurate test results. The State has required the new Program Manager to replace and install the existing workstations with upgraded inspection equipment, a host computer system used to submit daily inspection data to the DMV for registration denial, a user-friendly communications network with AIRS analyzers, and develop a reporting system to support program management.

The Program Manager is responsible by contract for developing and distributing programs or software associated with the program-specific user interface to the DMV, DEM, and AIRS network participants; creating a computer management system with the capacity for collecting, analyzing and reporting of vehicle test data to the DMV for vehicle registration enforcement; implementing procedures which will assure that no official inspection can occur without being monitored by the computer management system; using baseline profiling and statistical process control to continuously analyze program data and identify out-of-profile inspections in order to supervise conformance; providing a link to the EPA recall database; and providing training with periodic updates and changes that are required throughout the program duration.

AIRS are required to maintain and calibrate the emissions inspection equipment. The AIRS must obtain calibration and maintenance services from the program contractor. Failure to continue the agreement for these services constitutes a violation of the contract which can trigger a lockout of the ability to perform inspections and the subsequent removal of the testing equipment.

Should the AIRS fail to comply with program rules, the DMV may suspend or revoke the AIRS authorization to perform inspections. All AIRS have entered into an agreement with the Program Manager specifying performance criteria and provisions for

⁸ [“Performing Onboard Diagnostic System Checks as Part of a Vehicle Inspection and Maintenance Program”](#) June 2001.

⁹ Motor Vehicle Inspection and Maintenance Program Services Agreement between the State of Rhode Island Department of Administration and OPUS Technologies.

nonpayment and for the removal of test equipment in the case of nonperformance or noncompliance.¹⁰

Inspection documents including inspection reports, compliance reports, inspection stickers, and waiver documents are individually numbered to allow tracking and to prevent fraudulent use. Inspection documents or inspection stickers will be worthless if misappropriated or stolen as they cannot be validated (printed) until testing is complete.

10.0 Waivers and Compliance via Diagnostic Inspection (§51.360)

In 2021, there were a total of 424 waivers issued: 104 repair cost waivers, 90 repair time-delay waivers, 175 diagnostic waivers, and 55 “Block Island” waivers. 20,744 vehicles failed inspection in 2021. The 2021 Rhode Island waiver rate is 2.04%.¹¹

The DMV conducts the waiver program and issues waivers. Waiver records are tracked in the database for the duration of the program. Waiver “Requirements and Conditions” precludes warranty reimbursement or reversal of tampering costs from counting towards the waiver repair cost limit. Tampering is determined through the application of the transient test. All expenditures require documentation that the repair is appropriate to the cause of the emissions test failure.

The Rhode Island I/M Program allows for four different types of waivers if a vehicle fails the emissions test and a retest. The following are the different types of waiver types:

- a) a diagnostic waiver applies to vehicle owners whose vehicles have all emission control devices in place and operating and no additional repairs are reasonably possible or because they are unable to get their vehicle repaired because the necessary emission parts are no longer available or no longer manufactured.
- b) a repair cost limit waiver applies to vehicle owners if the vehicle failed the emission test, and the owner has spent a minimum of \$700 on emission-related parts and/or labor (labor must be performed by a CIRT to qualify).
- c) a repair time delay waiver is available for vehicle owners who can prove financial hardship.
- d) A “Block Island” waiver was added in 2018 because the program phased-out dynamometer testing. Due to the size of Block Island, and the speed requirements of a monitor reset, any car located there cannot have its monitors reset and no longer can have the transient test to use instead. Therefore, these vehicles are issued a waiver if the vehicle failed due exclusively to monitors being “Not Ready”, the MIL is functional but not illuminated and there are no DTCs present.

The DMV may issue a waiver certificate after a diagnostic inspection. To qualify for such a waiver, a vehicle failing an inspection and subsequent re-inspection for emissions must

¹⁰ Motor Vehicle Inspection and Maintenance Program Services Agreement between the State of Rhode Island Department of Administration and OPUS Technologies.

¹¹ Rhode Island DEM Annual EPA Inspection Report 2021.

undergo a complete, documented physical and functional diagnosis and inspection, conducted by the DMV. If the inspection indicates that no additional emission related repairs are reasonably possible because the emission control devices originally required for federal certification are in place and functioning as designed or no further repairs can be made because the parts required for the repairs are no longer manufactured, the vehicle is eligible for the diagnostic waiver. A repair time delay may also be granted to persons who qualify under DMV low-income guidelines.

Waiver issuances are granted only after a vehicle has failed a retest and all qualified repairs are complete. Repairs covered by a warranty are not included in the cost of repairs, waivers are not issued to owners of tampered vehicles, repairs must be appropriate to the cause of failure, and waiver repairs must be performed by a certified inspection repair technician (CIRT). DMV requires that all documentation of repairs be original documents, which DMV retains in their control. The current State program requires motorists to make an expenditure of at least seven hundred dollars (\$700) on actual, non-tampering related repairs to qualify for a waiver.¹²

11.0 Motorist Compliance Enforcement (§51.361)

Under DMV's motorist compliance enforcement program, an inspection sticker is issued to a vehicle operator whose vehicle has passed inspection and complies with all regulations. Inspection stickers are issued after the completion of a passing inspection. The DMV, in conjunction with State and municipal police, continue to enforce motorists' compliance by conducting roadside pullovers of vehicles with out-of-date or missing inspection stickers. Motorists found in violation are issued a 5-day notice and demand tag to obtain an inspection within 5 days. Failure to do so makes the motorist subject to a minimum fine of \$50 and registration suspension. In 2021, 978 five-day notice and demand tags were issued by the State Police, municipal police, and the DMV. 831 vehicle owners (85%) complied with the five-day notice and demand tags. Between 2014 and 2021, approximately 29,371 five-day notice and demand tags were issued by State Police, municipal police, and the DMV.¹³

Any person who operates their vehicle on the highways in Rhode Island that is not in compliance will face a suspension of their registration and a fine of up to \$1,000.¹⁴ The DMV, State, and municipal police have the authority to issue citations or notices of demand requiring the vehicle owner to obtain an inspection. The Rhode Island Traffic Tribunal has jurisdiction to enforce the administrative provisions of DMV Safety and Emissions Control Regulation No. 1. The Superior Courts for the State of Rhode Island shall have jurisdiction upon complaint of the Department to enforce against criminal violations of DMV Safety and Emissions Control Regulation No. 1.¹⁵

¹² See Appendix A.

¹³ Rhode Island DEM Annual EPA Inspection Report 2021.

¹⁴ See Appendix A.

¹⁵ See Appendix A.

12.0 Motorist Compliance Enforcement Program Oversight (§51.362)

Periodic audits of test program compliance documentation and other work products of DMV auditors are conducted by DMV supervisory personnel. The waiver process and waiver documentation are routinely audited by DMV supervisory personnel. The DMV will suspend the registration of any vehicle owner or lessee who is determined to be in violation of DMV Safety and Emissions Control Regulation No. 1, or who, after notice, does not comply with the regulations. As of 2017, a new computer program allows RI DMV to send out suspension notices to motorists who do not comply with the inspection requirement.

13.0 Quality Assurance (§51.363)

In accordance with 40 CFR 51.363, the Rhode Island program performs overt, covert, and digital performance audits. Auditing provides a direct oversight of the testing process and ensures that accurate, quality inspections are being conducted by AIRS. Audits are conducted by DMV and OPUS. Covert and overt audits are conducted to assure the quality of performance and other operational procedures of AIRS. The locations to be audited are drawn from areas of concern prompted by vehicle emissions profiling, previous violations and/or other analysis conducting during the overt and covert audits.

Overt audits include a check of document security, record keeping practices, certifications and required display information, observations, a written evaluation of each inspector's ability to perform the test procedure, and a quality control evaluation of test equipment. A total of 705 overt audits were conducted by DMV and the Program Manager during 2021.¹⁶

Covert audits are conducted with DMV and the Program Manager to audit AIRS. The covert vehicle is rigged to fail an OBD emissions test by covering the Malfunction Illumination Light (MIL) bulb with tape and buy cutting a wire to the air/fuel ratio sensor creating a Diagnostic Trouble Code (DTC). An inspection of the covert vehicle is completed by DMV and compared with the station inspection to confirm the audit. During 2021, 50 covert vehicle audits were conducted.¹⁷

Remote visual audits are performed with a remote review of the five most recent tests at inspection station to ensure the proper operation of the streaming camera is used during inspections. The camera collects an image of the inspector performing the inspection to verify the image meets program requirements. This process resulted in advanced troubleshooting of technical issues by alerting the Program Manager of any stations that needed camera repairs or assistance with network issues. A total of 6,789 remote visual audits were performed in 2021.¹⁸

¹⁶ Rhode Island DEM Annual EPA Inspection Report 2021.

¹⁷ Rhode Island DEM Annual EPA Inspection Report 2021.

¹⁸ Rhode Island DEM Annual EPA Inspection Report 2021.

Audits are conducted of the database and its software, the AIRS workstation, and other records or documentation relating to the appropriate and effective performance of inspections. The equipment specifications and monitoring methods prevent unauthorized tampering with the inspection equipment.

A security system for vehicle inspection reports, compliance certificates/inspection stickers, waiver certificates, and other sensitive documents exists. The security system prevents document theft and counterfeiting. The methods of loss prevention include strict accounting of all essential documents, and machine production or completion of each compliance certificate onsite for each vehicle eligible for each compliance certificate. The documents are counterfeit resistant, tamper-proof, and include a serial number.

14.0 Enforcement Against Contractors, Stations, and Inspectors (§51.364)

The contract executed by Rhode Island and the Program Manager requires the Program Manager to adhere to the requirements of the scope of work contained in the agreement. Failure to meet the requirements of the contract may result in the State exercising the option to send OPUS a written notice of violation, fines, or a termination of the agreement. All enforcement action is maintained by the State.

Program Manager performance assurance begins with a request for action or information. Should the Program Manager's employees fail to respond, the situation is elevated with the Program Manager. If the Program Manager fails to respond or the non-performing activity continues, a written notice of a hearing will be sent to OPUS management. The hearing determines the disposition of violations, failure to perform, or disregarding an official order.

AIRS must meet and maintain specific requirements to be authorized to inspect vehicles subject to the Rhode Island I/M Program. Regulations allow for the withdrawal of authorization of AIRS by the State for good cause at any time. All AIRS are required to execute an agreement with the Program Manager specifying performance criteria and provisions for nonpayment and for removal of test equipment in the case of nonperformance or noncompliance. DMV issues verbal warnings to AIRS for minor violations prior to the implementation of any penalties. The AIRS will be notified by DMV of a suspension hearing if infractions become numerous or serious in nature.

Should a hearing result in a suspension, the AIRS will be stripped of their authority to perform any further inspections. The first violation penalty is a minimum of ten days suspension, the second violation requires a minimum of thirty days, and the third and subsequent violations are subject to a minimum of six months (180 days) for each separate violation. In addition to the suspension penalties the Administrator may, at their discretion, impose a fine of up to \$1,000. The AIRS may request for reinstatement at the end of each suspension period. Reinstatement shall be at the discretion of the hearing board or the Administrator. If the infractions continue after reinstatement, a termination

of the AIRS authority to inspect will be imposed and the testing equipment will be removed from the AIRS location.¹⁹

In the case of inspector incompetence, the inspector, if not discharged, is to be retrained and must successfully demonstrate the ability to perform the test procedure prior to the restoration of testing privileges. For inspector violations resulting from factors other than incompetence, the inspector shall, at minimum, be suspended from testing for a defined period. Such suspensions shall increase with severity and frequency of violation, ultimately leading to a permanent certification revocation.

15.0 Data Collection (§51.365)

The Program Manager is required by contract to collect and maintain Rhode Island's I/M Program data and provide full cooperation and assistance in all respects necessary for the Rhode Island I/M Program to meet the requirements for Rhode Island and EPA reporting requirements.

Each AIRS analyzer creates a detailed record of each emissions inspection performed including, but not limited to: test record number; inspection workstation number; inspector identification number; date of test; emissions test start time; the time final emissions pass/fail is determined; vehicle identification number; license plate number; test certificate number; GVWR; model year; make and vehicle type of each vehicle tested; number of cylinders/engine displacement and transmission type for transient emission tests; odometer reading; category of test performed; vehicle fuel type; type of preconditioning performed, if applicable; emission test sequences used; emission malfunction codes; or the results of an alternative test as approved by the EPA Administrator.

The Program Manager maintains the data and supplies data to the State as needed. Data includes the number of inspections by AIRS, the time of inspection, corresponding test data, all repair costs, fleet inspections, and audit data. Weekly, monthly, annual, and special reports are submitted to the State.

The Program Manager is required by the contract to provide calibration and maintenance of all test equipment including the central data management system, ensuring quality control of all data collection.

16.0 Data Analysis and Reporting (§51.366)

The State, in cooperation with the Program Manager, shall submit an annual report to EPA containing summary data of program activities taking place in the previous test cycle. This report provides testing program statistics, information regarding the quality control program, the quality assurance program, and the enforcement program.

¹⁹ See Appendix A.

The State shall report biennially on all changes made to the program design, funding, personnel levels, procedures, regulations, and legal authority. The report will also detail and discuss any program weaknesses over the previous two years. The report also explains steps that are taken to address any weaknesses, the results of any corrective actions, and any future efforts planned. The reports must meet the timeframes and contain all information required by 40 CFR 51.366.

The contract requires data analysis and reporting used to monitor and evaluate the program. This reporting requirement is the responsibility of the contractor. The reporting requirement shall be a component of contract agreement.²⁰

17.0 Inspector Training and Licensing or Certification (§51.367)

Rhode Island has two levels of technician training in the I/M Program. The first level is the Certified Inspection Technician (CIT). The second level is the Certified Inspection Repair Technician (CIRT).

There are two steps a technician must complete to become a CIT. The first step is to complete the training provided by DMV for the safety inspection portion of the I/M Program. The second step required is a four-hour course provided by OPUS training the CIT for the emissions inspection portion of the I/M Program. CITs are required to pass an exam before being certified. CITs are certified to perform vehicle safety and emission inspections. The CIT certification is valid for two years. If the CIT neglects to obtain their re-certification license, OPUS will de-activate them from the inspection program.

CIRTs perform both inspections and repairs for motor vehicle safety and emissions issues. Only CIRTs can perform repairs whose costs qualify for the repair cost waiver. CIRTs are required to first obtain their CIT certification, then pass the RI CIRT written exam or possess an Automotive Service Excellence (ASE) Level 1 Advanced Engine Performance license. If a CIRT does not have their ASE Level 1 license, they have two years to obtain it to continue certification.

18.0 Public Information and Consumer Protection (§51.368)

Public awareness activities are conducted by the Program Manager with the approval of the DMV. The network computer system provides AIRS with program updates for CIRT exam sessions, training seminars, and technical bulletins. The program's website provides outreach to the public.²¹

There have been numerous "RI Emissions Safety Testing" annual newsletters produced over the last fourteen years; the most recent newsletter was released in Fall 2021 and a Fall 2022 newsletter is currently pending. These newsletters are distributed to AIRS in

²⁰ Motor Vehicle Inspection and Maintenance Program Services Agreement between the State of Rhode Island Department of Administration and OPUS Technologies.

²¹ [Rhode Island Inspection and Maintenance Website](#)

Rhode Island and provide an excellent source of information for technicians that cover a variety of topics including: OBD and fraud detection, software updates regarding the new equipment, troubleshooting tips, and using drive cycles to verify repairs.

A challenge center has been established at the DMV that is available to the consumer, which consists of a dedicated bay equipped with emissions testing equipment, identical to that used in an AIRS inspection system. The challenge center is operated by the DMV and is open during normal operating hours. The AIRS displays information in the motorist waiting area on how to arrange a challenge inspection and the potential coverage under federal required emission control warranties.

19.0 Improving Repair Effectiveness (§51.369)

The Division of Motor Vehicles and the Program Manager implemented the Repair Effectiveness Index (REI) in April 2001. The rating system assigns a value to the repair effectiveness of Certified Inspection Repair Technicians (CIRTs). The REI is evaluated based on vehicles passing the first retest, vehicles failing retests, vehicle that are issued cost limit waivers, and complaints filed by motorists. CIRTs are rated on a scale between one and five stars with the most effective technicians receiving a five-star rating. 95% of vehicles repaired by CIRTs pass on their first retest. The REI is maintained on the I/M Program website.²²

The Program Manager and the DMV have cooperated with technical colleges and vocational training schools to continue repair training for technicians. The training curriculum covers DMV guidelines, EPA air quality information, vehicle emissions, an overview of OBD operation and hardware, the emissions testing/retest process, and the emissions waiver process.

20.0 Compliance with Recall Notices (§51.370)

Rhode Island I/M technicians have access to the National On-Board Diagnostics Clearinghouse provided by Weber State University.²³ This provides electronic access to a computer database identifying unresolved recalls and other updates.

21.0 On-Road Testing (§51.371)

The on-road testing program shall be conducted via remote sensing. Measurements of HC, CO, NO and/or CO₂ shall be taken. A minimum of 0.5 percent of the fleet, or 20,000 vehicles, whichever is less, shall receive valid remote sensing. A valid remote sensing test is defined as any remote sensing test where the data received are sufficient to determine a subject vehicle's identity and emissions. The State conducts as many remote-sensing tests as necessary to obtain the required number of valid tests. Rhode Island has authority to enforce an out of cycle inspection for vehicles believed to be out of compliance with the standards and criteria for motor vehicle emissions inspection. OPUS

²² [Rhode Island Inspection and Maintenance Website](#)

²³ [OBD Clearinghouse Website](#)

conducted on-road testing in the Summer of 2021 and the next on-road testing evaluation is scheduled for late Spring 2023.

DMV requires that vehicles it has reason to believe are not in compliance with the standards and criteria for motor vehicle emissions inspection submit to an out of cycle inspection at a challenge station and, if necessary, be brought into compliance. In addition, vehicle number-plate data obtained in on-road testing will be compared to the registration database to determine if the vehicle is properly registered.

22.0 State Implementation Plan Submissions (§51.372)

The following is a list of revisions to the I/M Program.

ACTIVITY	DATE
Keating Technologies, Inc.	June 1999
Commencement of I/M Program	January 2000
Repair Effectiveness Implementation	April 2001
On-Board Diagnostic (OBD) SIP Revisions	November 2001
Proposed Regulation Revisions	March 2003
Light Duty Diesel Implementation	March 2005
Issuance of Second RFP	August 2006
Selection of Second Program Manager	October 2006
Proposed Regulation Amended	March 2007
Promulgation of Regulations	December 2008
Partial SIP Revision Submitted	January 2009
SIP Revision Submitted	December 2010
SIP Revision Submitted	December 2016
Proposed Regulation Amended	December 2018
SIP Revision Submitted	June 2023

23.0 Implementation Deadlines (§51.373)

As of 2018 all aspects of the updated I/M Program have been implemented.

Appendix A - Air Pollution Control Regulation No. 34 Rhode Island Motor Vehicle Inspection/Maintenance Program; Rhode Island Motor Vehicle Safety and Emissions Control Regulation No. 1

Air Pollution Control Regulation No. 34: Rhode Island Motor Vehicle Inspection/Maintenance Program can be found online at: <https://rules.sos.ri.gov/Reg34>.

Rhode Island Motor Vehicle Safety and Emissions Control Regulation No. 1 can be found online at: <https://dmv.ri.gov/regulations>.

Appendix B - List of Authorized Inspection Repair Stations (AIRS)

The list of authorized inspection repair stations can be found online at:
<https://dmv.ri.gov/inspections/Safety-and-Emissions-Stations.pdf>.

Appendix C - Rhode Island DMV Official Manual for Vehicle Inspection

The Rhode Island DMV Official Manual for Vehicle Inspections can be found online at: <https://dmv.ri.gov/safety-emissions-inspections>.

The manual must be downloaded from the PDF attachment found on the webpage.

Appendix D – Rhode Island MOVES3 Analysis

The following MOVES documents have been submitted to EPA with this SIP Revision:

- MOVES run specifications for the 2020, 2023, and 2026 runs
- MOVES inputs used for the 2020, 2023, and 2026 runs
- MOVES outputs from the 2020, 2023, and 2026 runs