

250-RICR-120-05-34

## TITLE 250 – DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

### CHAPTER 120 – AIR RESOURCES

#### SUBCHAPTER 05 - AIR POLLUTION CONTROL

PART 34 - Rhode Island Motor Vehicle Inspection ~~and~~ Maintenance Program

### 34.1 Purpose and Authority

#### 34.1.1 Purpose

The purpose of this regulation is to specify the requirements for Rhode Island's Motor Vehicle Inspection/Maintenance Program.

#### 34.1.2 Authority

These regulations are authorized pursuant to R.I. Gen. Laws § 42-17.1-2(19) and R.I. Gen. Laws Chapter 23-23, and have been promulgated pursuant to the procedures set forth in the Rhode Island Administrative Procedures Act, R.I. Gen. Laws Chapter 42-35.

### 34.23 Application

The terms and provisions of this regulation shall be liberally construed to permit the Department to effectuate the purposes of state laws, goals and policies.

### 34.34 Severability

If any provision of this regulation or the application thereof to any person or circumstance, is held invalid by a court of competent jurisdiction, the validity of the remainder of the regulation shall not be affected thereby.

### 34.4 Incorporated Materials

These regulations hereby adopt and incorporate 40 C.F.R. §§ ~~86.1832-01 and 85.2222 (2018)~~ by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.

### 34.5 Definitions

- A. Unless otherwise expressly defined in this section, the terms used in this regulation shall be defined by reference to [Part 0](#) of this Subchapter (General

Definitions). As used in this regulation, the following terms shall, where the context permits, be construed as follows:

- ~~1. "Adjusted loaded vehicle weight" means the numerical average of vehicle curb weight and gross vehicle weight rating.~~
21. "Authorized Inspection Repair Station" or "AIRS" means an inspection location authorized by the Department to provide motor vehicle safety and emission inspection and repairs, or inspections only.
32. "Calibration" means the act of checking and adjusting the exhaust emission analyzer by introducing reference gases of known concentrations into the analyzer.
43. "CIRT" means a Certified Inspection Repair Technician certified by the Department of Revenue to provide both inspection and repairs for motor vehicle safety and emissions.
54. "CIT" means a Certified Inspection Technician certified by the Department of Revenue to perform motor vehicle safety and emission inspections only.
- ~~6. "Curb weight" means the actual or the manufacturer's estimated weight of the vehicle in operational status with all standard equipment and weight of fuel at nominal tank capacity, and the weight of optional equipment computed in accordance with 40 C.F.R. § 86.1832-01, incorporated in § 34.4 of this Part (xxxx2017).~~
75. "Day" means a calendar day, unless otherwise designated.
86. "Dealer" means a person or entity engaged in the business of buying, selling, or exchanging vehicles and who has an established place of business for such purpose and as further defined in R.I. Gen. Laws § 31-1-19(b).
7. "Emission control component inspection" means a visual inspection, conducted by the CIT, of the Malfunction Indicator Lamp (MIL) and emission control devices originally installed by the manufacturer.
- ~~9. "Exhaust emissions standard" means the maximum allowable levels of carbon monoxide, hydrocarbons and oxides of nitrogen appropriate for the age and type of vehicle tested.~~
- ~~10. "Gross vehicle weight rating" or "GVWR)" means the weight value specified by the vehicle manufacturer on the Federal weight certification label as the loaded weight of a vehicle.~~
- ~~11. "IM240" means the transient dynamometer schedule described in EPA Report number EPA-AA-EPSP-IM-93-1 April 1994.~~

- ~~428.~~ "Inspection" means the testing of the exhaust and functional emission controls along with a safety inspection of a subject vehicle.
- ~~439.~~ "Inspection station" means an inspection facility for motor vehicle safety, on-board diagnostics and emissions inspection operated by an AIRS.
- ~~14.~~ ~~"Loaded vehicle weight" means the vehicle's curb weight plus three hundred (300) pounds.~~
10. "Malfunction indicator light" or "MIL" means a warning indicator lamp used by the on-board diagnostic system to indicate a malfunction in the emission control system.
- ~~4511.~~ "Model year" or "MY" means the manufacturer's annual production period for each engine family which includes January 1 of a calendar year or, if the manufacturer has no annual production period, the calendar year. In the case of any motor vehicle manufactured in two (2) or more stages, the time of manufacture shall be the date of completion of the chassis.
- ~~4612.~~ "Motor vehicle" means every motor vehicle which is self-propelled, except vehicles moved exclusively by human power and motorized wheelchairs.
- ~~17.~~ ~~"New motor vehicle" means a motor vehicle that the equitable or legal title has never been transferred to the first person who in good faith purchases the vehicle for purposes other than resale.~~
- ~~18.~~ ~~"Operator" means any motorist, owner or lessee in control of a motor vehicle.~~
- ~~4913.~~ "On-board diagnostics" or "OBD" means the system that monitors and records the operations and faults of a vehicle's emissions controls and related systems.
- ~~20.~~ ~~"RI2000" means the transient dynamometer emissions test described in Part 34 of this Subchapter (Rhode Island Motor Vehicle Inspection/Maintenance Program).~~
- ~~2414.~~ "Rhode Island I/M Program" or "RIVIP" means the Rhode Island Motor Vehicle Inspection/Maintenance Program.
- ~~2215.~~ "Rhode Island I/M Program manager" means a person, business firm, partnership, or corporation with whom the Department has a contract that provides for the establishment and operation of the Rhode Island Motor Vehicle Inspection/Maintenance Program.
- ~~23.~~ ~~"Remote sensing device" means a device which directs an infra-red or laser beam across a lane of traffic to instantly detect and read the concentrations of pollutants in a vehicle's exhaust.~~

~~2416.~~ "Safety and emission inspection program" means an enhanced vehicle emission inspection program as defined by the Environmental Protection Agency including, but not limited to, a network of computerized emission analyzers, on-road testing, and inspection of vehicle safety devices through an inspection program.

~~2517.~~ "Test" or "Testing" means s the use of analyzers and diagnostic equipment as appropriate and the application of techniques, methods, policies and procedures established or approved by the Department for the purpose of comparing emission levels and/or operating systems in vehicles to regulatory safety and emission standards.

~~26.~~ ~~"Transient emission test" means the quantitative measurement and comparison to established standards of a vehicle's exhaust emissions over a specified maximum time period while operating the vehicle on an inertia weight loaded dynamometer over a specified driving cycle.~~

~~2718.~~ "Year" means a calendar year.

## 34.6 Applicability

These regulations apply to all motor vehicles subject to the inspection requirements of the Rhode Island Motor Vehicle Inspection/Maintenance Program, Safety and Emissions Control Regulation No. 1 ([280-RICR-30-15-1](#)). ~~(280-RICR-30-15-1).~~

## 34.7 Inspection Standards

- A. ~~These regulations establish the following standards and criteria for motor vehicle emissions inspections. These regulations are devised to give consideration to the levels of emissions reduction necessary to achieve and maintain federal and state ambient air quality standards and the levels necessary to protect human health and the environment. Vehicles subject to the Rhode Island I/M Program shall be inspected for compliance with the vehicle emissions standards using an evaporative emissions inspection, an on-board diagnostic inspection, and a visual emissions control component inspection. The standards and criteria shall include, but not be limited to, a requirement to test the emissions of motor vehicles for hydrocarbons (HC), carbon monoxide (CO) and oxides of nitrogen (NOx) using an exhaust emissions test, and/or the examination of a vehicle's on-board diagnostic system, using the RI2000 test analyzer.~~
- B. ~~Vehicles subject to the Rhode Island I/M Program shall be inspected for compliance with the following standards, criteria and procedures using an exhaust emissions test, evaporative emissions test, and on-board diagnostics inspection.~~

- ~~€1.~~ For gasoline-powered vehicles, all 1996 and newer vehicles should be tested with OBD. If a gasoline powered vehicle not originally designed to have OBD is presented, it will be tested to by the appropriate dynamometer standards. If the vehicle cannot be tested on a dynamometer (such as an all-wheel drive vehicle), it will receive the two-speed idle test performing an emissions control component inspection.
- ~~D2.~~ OBD-equipped diesel vehicles should be tested with OBD. If the vehicle is diesel and cannot be tested using OBD, it will be tested with the dynamometer opacity test. If the vehicle cannot be tested on a dynamometer (such as an all-wheel drive vehicle), it will not be subjected to an emissions test by performing an emissions control component inspection.
3. Gas-powered vehicles Model Year (MY) 1995 and older and diesel-powered vehicles MY 1996 and older shall be subjected to an eEmission cControl cComponent iinspection.
4. The evaporative emissions inspection shall be performed by means of a visual fuel cap inspection to determine if the fuel cap is present and free of defects.

### ~~34.8 Exhaust Emissions Standards~~

#### ~~A. Phase-in Standards~~

- ~~1. The phase-in standards § 34.8(A)(1)(a) through (c), (Tables I through III below) shall apply for two (2) years after the inspection requirement commences.~~

#### ~~a. Table I: Dynamometer Exhaust Emissions Standard~~

<del>Light Duty Vehicles</del>			
	<del>Hydrocarbons (grams per mile)</del>	<del>Carbon Monoxide (grams per mile)</del>	<del>Oxides of Nitrogen (grams per mile)</del>
<del>1996 and newer</del>	<del>2.25</del>	<del>23.74</del>	<del>3.25</del>
<del>1991 — 1995</del>	<del>3.06</del>	<del>30.99</del>	<del>4.09</del>

1983—1990	4.70	45.48	7.21
1981—1982	4.70	88.96	7.21
1980	4.70	88.96	9.92
1977—1979	15.92	132.44	9.92
1975—1976	15.92	132.44	14.92
Pre-1975 (advisory)	15.92	132.44	14.92
Light Duty Trucks 1			
Trucks less than or equal to 6,000 pounds GVWR			
	Hydrocarbons (grams per mile)	Carbon Monoxide (grams per mile)	Oxides of Nitrogen (grams per mile)
1996 and newer 3,750 LVW or less	2.25	23.74	3.25
1996 and newer Greater than 3,750 LVW	2.66	30.99	4.09
1991—1995	5.51	88.96	4.92
1988—1990	7.15	117.95	8.46
1984—1987	10.31	117.95	11.59
1979—1983	15.92	146.93	11.59
1975—1978	16.94	175.92	14.92

<del>Pre-1975 (advisory)</del>	<del>16.94</del>	<del>175.92</del>	<del>14.92</del>
<del>Light Duty Trucks-2</del>			
<del>Trucks greater than 6,000 pounds GVWR</del>			
	<del>Hydrocarbons (grams per mile)</del>	<del>Carbon Monoxide (grams per mile)</del>	<del>Oxides of Nitrogen (grams per mile)</del>
<del>1996 and newer 5,750 ALVW or less</del>	<del>2.66</del>	<del>30.99</del>	<del>4.09</del>
<del>1996 and newer greater than 5,750 ALVW</del>	<del>5.51</del>	<del>88.96</del>	<del>6.59</del>
<del>1991—1995</del>	<del>5.51</del>	<del>88.96</del>	<del>7.42</del>
<del>1988—1990</del>	<del>7.15</del>	<del>117.95</del>	<del>8.25</del>
<del>1984—1987</del>	<del>10.31</del>	<del>117.95</del>	<del>11.59</del>
<del>1979—1983</del>	<del>15.92</del>	<del>146.93</del>	<del>11.59</del>
<del>1975—1978</del>	<del>16.94</del>	<del>175.92</del>	<del>14.92</del>
<del>Pre-1975 (advisory)</del>	<del>16.94</del>	<del>175.92</del>	<del>14.92</del>
<del>LVW means loaded vehicle weight. ALVW means adjusted loaded vehicle weight.</del>			

~~b. Table II: Two Speed Idle Exhaust Emissions Standard~~

~~Light Duty Vehicles~~

~~Idle and 2500 RPM Cutpoints~~

	<del>Hydrocarbons (ppm)</del>	<del>Carbon Monoxide (percent)</del>
<del>1981 and later</del>	<del>220</del>	<del>1.2</del>
<del>1979-1980</del>	<del>300</del>	<del>2.5</del>
<del>1975-1978</del>	<del>300</del>	<del>3.0</del>
<del>1968-1974</del>	<del>700</del>	<del>6.0</del>
<del>Pre-1968</del>	<del>800</del>	<del>7.0</del>

~~Light Duty Trucks 1~~

~~Trucks less than or equal to 6,000 pounds GVWR~~

~~Idle and 2500 RPM Cutpoints~~

	<del>Hydrocarbons (ppm)</del>	<del>Carbon Monoxide (percent)</del>
<del>1981 and later</del>	<del>220</del>	<del>1.2</del>
<del>1979-1980</del>	<del>300</del>	<del>2.5</del>
<del>1975-1978</del>	<del>300</del>	<del>3.0</del>
<del>1968-1974</del>	<del>700</del>	<del>6.0</del>



Pre-1968	800	7.0
<del>Light Duty Trucks 2</del>		
<del>Trucks greater than 6,000 pounds GVWR</del>		
<del>Idle and 2500 RPM Cutpoints</del>		
	Hydrocarbons (ppm)	Carbon Monoxide (percent)
1981 and later	220	1.2
1979-1980	300	2.5
1975-1978	300	3.0
1968-1974	700	6.0
Pre-1968	800	7.0

c. ~~Table III: Diesel Vehicle Opacity Emissions Standard~~

<del>All Light-Duty Vehicles and Trucks up to 8,500 lbs. GVWR</del>		
<del>Model Year</del>	<del>Diesel Smoke Opacity Cutpoints (%)</del>	
	<del>Loaded</del>	<del>Idle</del>
<del>All</del>	<del>20%</del>	<del>20%</del>

B. ~~Final Standards~~

1. ~~The final standards shall apply beginning two years after the inspection requirement commences and continue thereafter.~~

a. ~~Table IV: Dynamometer Exhaust Emissions Standard~~

<del>Light Duty Vehicles</del>			
	<del>Hydrocarbons (grams per mile)</del>	<del>Carbon Monoxide (grams per mile)</del>	<del>Oxides of Nitrogen (grams per mile)</del>
<del>1996 and newer</del>	<del>1.84</del>	<del>16.50</del>	<del>2.42</del>
<del>1991—1995</del>	<del>2.25</del>	<del>23.74</del>	<del>3.25</del>
<del>1984—1990</del>	<del>2.25</del>	<del>23.74</del>	<del>3.25</del>
<del>1981—1982</del>	<del>2.25</del>	<del>45.48</del>	<del>3.25</del>
<del>1980</del>	<del>2.25</del>	<del>45.48</del>	<del>6.59</del>
<del>1977—1979</del>	<del>6.74</del>	<del>96.21</del>	<del>6.59</del>
<del>1975—1976</del>	<del>6.74</del>	<del>96.21</del>	<del>9.92</del>
<del>Pre-1975 (advisory)</del>	<del>15.92</del>	<del>132.44</del>	<del>14.92</del>
<del>Light Duty Trucks 1</del>			
<del>Trucks less than or equal to 6,000 pounds GVWR</del>			
	<del>Hydrocarbons (grams per mile)</del>	<del>Carbon Monoxide (grams per mile)</del>	<del>Oxides of Nitrogen (grams per mile)</del>
<del>1996 and newer 3,750 LVW or less</del>	<del>1.84</del>	<del>16.50</del>	<del>2.42</del>

1996 and newer Greater than 3,750-LVW	2.25	20.84	2.92
1991—1995	3.88	59.97	4.09
1988—1990	3.88	59.97	4.09
1984—1987	3.88	59.97	7.42
1979—1983	7.55	103.45	7.42
1975—1978	8.78	117.95	9.92
Pre-1975 (advisory)	16.94	175.92	14.92
Light Duty Trucks-2 Trucks greater than 6,000-pounds GVWR			
	Hydrocarbons (grams per mile)	Carbon Monoxide (grams per mile)	Oxides of Nitrogen (grams per mile)
1996 and newer 5,750-ALVW or less	2.25	20.84	2.92
1996 and newer greater than 5,750-ALVW	2.25	23.74	3.25
1991—1995	3.88	59.97	5.75
1988—1990	3.88	59.97	5.75

<del>1984—1987</del>	<del>3.88</del>	<del>59.97</del>	<del>7.42</del>
<del>1979—1983</del>	<del>7.55</del>	<del>103.45</del>	<del>7.42</del>
<del>1975—1978</del>	<del>8.78</del>	<del>117.95</del>	<del>9.92</del>
<del>Pre-1975 (advisory)</del>	<del>16.94</del>	<del>175.92</del>	<del>14.92</del>
<del>L/VW means loaded vehicle weight. AL/VW means adjusted loaded vehicle weight.</del>			

~~b. Table V: Two-Speed Idle Exhaust Emissions Standard~~

<del>Light Duty Vehicles</del>		
<del>Idle and 2500-RPM Cutpoints</del>		
	<del>Hydrocarbons (ppm)</del>	<del>Carbon Monoxide (percent)</del>
<del>1981 and later</del>	<del>220</del>	<del>1.2</del>
<del>1979-1980</del>	<del>300</del>	<del>2.5</del>
<del>1975-1978</del>	<del>300</del>	<del>3.0</del>
<del>1968-1974</del>	<del>700</del>	<del>6.0</del>
<del>Pre-1968</del>	<del>800</del>	<del>7.0</del>

~~Light Duty Trucks 1~~

~~Trucks less than or equal to 6,000 pounds GVWR~~

~~Idle and 2500 RPM Cutpoints~~

	<del>Hydrocarbons (ppm)</del>	<del>Carbon Monoxide (percent)</del>
<del>1981 and later</del>	<del>220</del>	<del>1.2</del>
<del>1979-1980</del>	<del>300</del>	<del>2.5</del>
<del>1975-1978</del>	<del>300</del>	<del>3.0</del>
<del>1968-1974</del>	<del>700</del>	<del>6.0</del>
<del>Pre-1968</del>	<del>800</del>	<del>7.0</del>

~~Light Duty Trucks 2~~

~~Trucks greater than 6,000 pounds GVWR~~

~~Idle and 2500 RPM Cutpoints~~

	<del>Hydrocarbons (ppm)</del>	<del>Carbon Monoxide (percent)</del>
<del>1981 and later</del>	<del>220</del>	<del>1.2</del>
<del>1979-1980</del>	<del>300</del>	<del>2.5</del>
<del>1975-1978</del>	<del>300</del>	<del>3.0</del>
<del>1968-1974</del>	<del>700</del>	<del>6.0</del>

Pre-1968	800	7.0
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c. ~~Table VI: Diesel Vehicle Opacity Emissions Standard~~

All Light-Duty Vehicles and Trucks up to 8,500 lbs. GVWR	
Model Year	Diesel Smoke Opacity Standards (%)
	Dynamometer Test
All	20%

C. ~~Opacity Test: Dynamometer Opacity Test~~

- ~~The RI2000 workstation and dynamometer shall be used to inspect non-OBD equipped diesel vehicles capable of being tested on the dynamometer for opacity. Vehicles shall be driven to a speed of thirty (30) miles per hour with the load increasing as the vehicle increases speed. When the vehicle speed and dynamometer load are within  $\pm$  five percent (5%) of target for a 5-second stabilization period, the system will take opacity samples using the diesel exhaust emissions probe during the 15-second sample period and automatically record opacity readings. A 5-second running average of the opacity readings will be calculated by the RI2000 analyzer. The lowest average for the test period will be utilized as the final results.~~

D. ~~Evaporative Emissions Standard: Gas Cap Integrity Test~~

- ~~Gas caps shall be inspected using the Gas Cap Integrity Test for non-OBD-equipped vehicles. Gas caps shall be subject to an initial system pressure of thirty (30)  $\pm$  1 inches of water. Gas caps with a leak rate of less than or equal to sixty (60) cubic centimeters per minute shall have passed the Gas Cap Integrity Test.~~

**34.98 On-board Diagnostic Test Standards Vehicle Emission Standards**

A. On-Board Diagnostic Test Standards

1. OBD inspection shall occur through the connection of the OBD-II SAE standardized vehicle port to the ~~RI2000~~ RIVIP workstation. Inspectors

shall follow the inspection procedures as defined in 40 C.F.R. § 85.2222, incorporated in § 34.4 of this Part. ~~(20178(xxxx)).~~

- B2. An on-board diagnosis system inspection failure shall occur when:
- 1a. For MY 2001 and newer vehicles, more than one monitor in a vehicle's on-board computer is not set as ready; or,
  - 2b. For MY 1996-2000 vehicles, more than two monitors in a vehicle's on-board computer are not set as ready; or,
  - 3c. The malfunction indicator light (MIL) does not illuminate at all when the vehicle is in the key-on/engine-off condition, even if no diagnostic trouble codes are present and the MIL has not been commanded on.
- E3. If the vehicle OBD system is not communicating with the R12000-RIVIP analyzer, the vehicle shall undergo the appropriate exhaust emissions test emissions control component inspection in § 34.8(C) of this Part.

B. Evaporative Emissions Standard

1. An evaporative emission inspection failure shall occur when:
- a. A fuel cap is not present.
  - b. The fuel cap is found to be defective.

C. Emissions Control Component Inspection Standards

1. ~~The CIT shall also perform Aa~~ A visual inspection of the emission control devices installed in the vehicle by the manufacturer shall be performed to verify that they are in place as originally equipped, have not been tampered with and that they appear to be functional.
2. ~~An emissions control component inspection failure shall occur when: The following results shall be cause for rejection:~~
- a. ~~The v~~ The vehicle was originally equipped with an MIL and it is not functional;
  - b. ~~The v~~ The vehicle was originally equipped with an MIL and it is illuminated when the vehicle is running;
  - c. ~~Emission c~~ Emission control components have been removed, have been tampered with, or are non-functional.

## 34.109 Inspection Procedures

The AIRS shall conduct emissions or OBD inspections using the inspection ~~and calibration~~ procedures programmed into the ~~RI2000-RIVIP~~ analyzers by the Rhode Island I/M Program Manager. OBD inspection procedures shall comply with OBD procedures defined in 40 C.F.R. § 85.2222, incorporated in § 34.4 of this Part. (20178xxxx). ~~Emissions test procedures shall measure and record exhaust emissions to assess compliance with standards in § 34.8 of this Part.~~

## 34.110 ~~\_\_\_\_\_~~ A Audits

A. The Rhode Island I/M Program Manager shall cooperate with the Department in conjunction with the conducting of audits of, records, equipment and computer data, by providing, in a timely manner, access, documentation and computer information which may be required to complete any Rhode Island I/M Program audits including, but not limited to, the following audits:

### ~~B1.~~ Equipment aAudits

- ~~4~~a. Quality control evaluations shall be conducted at a minimum of two overt audits per year, per inspection bay on emissions test equipment, with additional audits as needed. The audits may be conducted electronically using the centralized computer. The evaluations ~~will~~shall include:
- ~~a. \_\_\_\_\_ A gas audit using gases of known concentrations and comparing these concentrations to actual readings;~~
  - ~~b. \_\_\_\_\_ A check for tampering, worn instrumentation, blocked filters, and other conditions that would impede accurate sampling;~~
  - ~~c. \_\_\_\_\_ A check for critical flow;~~
  - ~~d. \_\_\_\_\_ A check of the Constant Volume Sample flow calibration;~~
  - ~~e. \_\_\_\_\_ A leak check;~~
  - ~~f. \_\_\_\_\_ A check to determine that inspection station gas bottles used for calibration purposes are properly labeled and within relevant tolerances;~~
  - g(1). A check for the optimization of the analyzer;
  - ~~h. \_\_\_\_\_ Functional dynamometer checks addressing coast down, roll speed, roll distance, inertia weight selection and power absorption;~~



~~i. A check of the system's ability to accurately detect background pollutant concentrations;~~

~~j. A check of evaporative test equipment (gas cap tester); and,~~

~~(2)k. A check of on-board diagnostics testing equipment.~~

~~€2.~~ Computer and ~~r~~Record ~~a~~Audits

~~4a.~~ The Rhode Island I/M Program Manager shall provide, for the emissions inspections network, a computer system which shall interface with the Department of Revenue's computer system and be devised to allow for the capacity to make a real-time collection, analysis and reporting of test data, quality control data, and perform other analysis and reporting on all aspects of the Rhode Island Vehicle Emissions Inspection Program.

**34.1211—Reporting**

A. The Rhode Island I/M Program Manager shall assist in the collection of general information detailing analysis and evaluation of test data, quality assurance, quality control, enforcement and other areas of the Rhode Island Vehicle Inspection Program.

B. Quality control data collected may consist of video and still images obtained from the analyzer during the inspection.