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STATE OF RHODE ISLAND

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2009

A N A C T

RELATING TO MOTOR AND OTHER VEHICLES - THE DIESEL EMISSIONS
REDUCTION ACT

Introduced By: Representatives Sullivan, Fierro, and D Caprio

Date Introduced: February 26, 2009

Referred To: House Environment and Natural Resources

It is enacted by the General Assembly as follows:

1 SECTION 1. Chapter 31-47.3 of the General Laws entitled "The Diesel Emissions
2 Reduction Act" is hereby amended by adding thereto the following sections:

3 **31-47.3-1.1. Purpose.** – This act shall be known and may be cited as "An Act
4 Concerning Government Responsibility To Protect Public Health From Diesel Pollution." The
5 general purposes of this act are to:

6 (1) Minimize human exposure to and health risks from diesel pollution;

7 (2) Reduce health costs, missed school days, lost worker productivity and premature
8 mortality linked to exposure to the diesel particulate matter (PM) and other diesel pollutants;

9 (3) Achieve maximum feasible diesel particulate matter emissions reductions and
10 diminished human exposure that is additional to the impact of federal diesel emission rules,
11 which focus mostly on new engines;

12 (4) Advance the state's climate protection goals and climate action plan by reducing the
13 amount of black carbon pollution emitted by diesels; and

14 (5) Achieve health benefits for Rhode Island by ensuring state contracting and leasing
15 takes advantage of retrofits that are occurring in the marketplace.

16 **31-47.3-4. -- Use of emission control technology in state vehicles and new state public**
17 **works contracts.** -- (a)(i) Contingent upon the availability of state or federal funds, any heavy
18 duty vehicle that is owned by or leased by a state agency or state authority on and after January 1,

1 2010 shall be powered by a model year 1994 or newer engine that has properly operating and
2 maintained Level 3 controls.

3 (ii) If Level 3 devices have not been verified for use on particular engines, Level 2
4 verified devices must be required; if neither Level 3 nor Level 2 devices have been verified for
5 use on particular engines, Level 1 verified devices must be required.

6 (iii) Funds from the diesel pollution reduction fund or other available state or federal
7 funds shall cover the incremental cost of the required emission controls.

8 (b) Any heavy duty vehicle used in the performance of a public works contract with a
9 state agency or state authority entered into, extended, or renewed on and after January 1, 2010,
10 funded in whole or in part by federal monies and having a total cost of at least two million dollars
11 (\$2,000,000), shall be powered by a model year 1994 or newer engine that has properly operating
12 and maintained Level 3 controls.

13 (1) This requirement shall be specified by the procuring agency in any solicitation for
14 such a public works contract and in the contract entered into as a result of such solicitation.

15 (2) If Level 3 verified emissions control devices have not been verified for use on
16 particular engines, Level 2 verified devices must be required; if neither Level 3 nor Level 2
17 devices have been verified for use on particular engines, Level 1 verified devices must be
18 required.

19 (c) Non-road construction equipment must use ultra-low sulfur diesel fuel in conjunction
20 with the emissions control device.

21 (d) The emission control technology requirements of subsections (a) and (b) herein shall
22 not apply to:

23 (1) Vehicles that are specially equipped and used for emergency response, as well as
24 other vehicles that are operated under a contract for emergency response;

25 (2) Vehicles and equipment dedicated for snow removal; and

26 (3) Farm equipment.

27 (e) Additional requirements for public works projects:

28 (1) Construction shall not proceed until the contractor submits a certified list of all diesel
29 vehicles, construction equipment, and generators to be used on-site. The list shall include the
30 following:

31 (i) Contractor and subcontractor names and addresses, plus contact person responsible for
32 the vehicles or equipment.

33 (ii) Equipment type, manufacturer, engine model year, engine certification (Tier rating),
34 ECM calibration, horsepower, plate, serial number, and expected fuel usage and/or hours of

1 operation.

2 (iii) For the pollution control technology installed: technology type, serial number, make,
3 model, manufacturer, EPA/CARB verification number/Level, and installation date.

4 (2) If the contractor subsequently needs to bring on site equipment not on the list, the
5 contractor shall submit written notification within twenty-four (24) hours that attests the
6 equipment complies with all contract conditions.

7 (3) All diesel equipment shall comply with all pertinent local, state, and federal
8 regulations relative to exhaust emission controls and safety.

9 (4) The contractor shall establish generator sites and truck-staging zones for vehicles
10 waiting to load or unload material on-site. Such zones shall be located where diesel emissions
11 have the least impact on abutters, the general public, and especially sensitive receptors such as
12 hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.

13 (5) Enforcement of public works specifications.

14 (f) Any solicitation for a public works contract subject to the provisions of subsection (b)
15 and any contract entered into as a result of such solicitation shall include provisions authorizing
16 independent monitoring and inspection of the contractor's compliance with the requirements of
17 this section and requiring that the contractor comply with this section. The contractor shall be
18 liable for a fee of two hundred dollars (\$200) for the review of the contractor's compliance with
19 the provisions of this section, and the contracting state agency or authority may withhold and
20 deduct the fee from monies otherwise due the contractor.

21 (1) All vehicles and equipment to which the requirements of subsection (b) are applicable
22 will be subject to random inspections to ensure full compliance with those requirements. If any
23 equipment is found to be non-compliant, the contractor must remove or retrofit this equipment or
24 vehicle within twenty-four (24) hours or be subject to liquidated damages pursuant to subdivision
25 (3) of this subsection until that piece of equipment or vehicle is removed from the project.

26 (2) In the event of a violation of any provision of subsection (b), except as provided in
27 subdivision (4) of this subsection, liquidated damages shall be assessed against the contractor a
28 penalty in the amount of up to five thousand dollars (\$5,000) for each violation (with each piece
29 of noncomplying equipment and each day of noncompliance being a separate violation). Said
30 liquidated damages are not imposed as a penalty but as an estimate of the damages that the state
31 agency or authority will sustain from delay in completion of the work, as well as resultant
32 damages to public health of its citizens, which damages by their nature are not capable of precise
33 proof. The state agency or authority may withhold and deduct from monies otherwise due the
34 contractor the amount of liquidated damages due to the state agency or authority.

1 (3) No contractor shall make a false statement or claim with respect to any matter
2 material to compliance with the provisions of subsection (b) to the state agency or authority.
3 Any contractor making such a false statement shall pay the state agency or authority a penalty of
4 up to ten thousand dollars (\$10,000) for each such statement (with each piece of noncomplying
5 equipment and each day of noncompliance being a separate violation) as liquidated damages
6 pursuant to the provisions of subdivision (3) of this subsection.

7 (4) Fees and liquidated damages paid to the state agency or authority under this
8 subsection shall be divided equally, with fifty percent (50%) retained by the offended state
9 agency or authority, and fifty percent (50%) placed in the diesel pollution reduction fund, or if no
10 such fund has been established, provided to the director for use in reducing particulate emissions
11 from diesel heavy duty vehicles.

12 (g) On or before July 1, 2010 and on or before every July 1 thereafter until 2030 each
13 state agency and state authority subject to the provisions of subdivision (1) shall report to the
14 director on the use of the retrofit technology as required under this section. The information in
15 this report shall include, but not be limited to, for each state agency and state authority covered by
16 this section:

17 (1) The total number of diesel fuel-powered motor vehicles and construction equipment
18 operated by, leased by or contracted by such agencies and the number of such vehicles and
19 equipment employing retrofit technology as required under this section including a breakdown by
20 motor vehicle model, engine year and the type of technology used for each vehicle.

21 (2) The number of such motor vehicles that are equipped with an engine certified to the
22 applicable EPA 2007 heavy-duty highway diesel standards or the EPA Tier 4 nonroad diesel
23 standards, as applied to particulate matter emissions, or to any subsequent EPA standard that is at
24 least as stringent; and

25 (h) On or before August 1, 2010 and each year thereafter until 2030 the director shall
26 compile all information submitted by state procuring agencies as required by subsection (g) above
27 and present a report to the governor and the general assembly.

28 (i) The requirements of this section shall expire on January 1, 2030.

29 **31-47.3-5. Federal funding.** – (a) With respect to each application by a state agency or
30 state authority for federal funding for a public works contract, including, but not limited to,
31 federal highway funding, the cost of the project(s) applied for shall include the full cost of the
32 emissions reductions measures required in subsection 31-47.3-4(b) for state and non state owned
33 vehicles, equipment and generators.

34 (b) (1) All costs associated with the installation by a contractor of Level 3 control for a

1 specific project in order to comply with the provisions of subsection 31-47.3-4(b) shall be fully
2 reimbursed from project funds, provided that:

3 (i) The control technology is installed before the applicable vehicle is brought onto the
4 project site;

5 (ii) The contractor submits documentation, including the technology type, EPA/CARB
6 verification number/control Level, manufacturer, make, model, serial number and installation
7 date, proving by date that the technology was installed for this project and certifying that the
8 expenditure for installation was not previously reimbursed by any public agency or public
9 contract; and

10 (iii) The control technology is installed prior to January 1, 2014.

11 (2) Retrofits installed with funds from this project shall remain on the heavy-duty diesel
12 vehicle or diesel nonroad vehicle for the useful life of the emission control device or the machine.
13 In the event a retrofit installed with funds from this project is removed or swapped onto another
14 vehicle, the contractor in violation shall pay the state agency or state authority a penalty of up to
15 ten thousand dollars (\$10,000) for each piece of noncomplying equipment.

16 (3) Costs associated with the installation of Level 3 emission control technology that are
17 reimbursable under subsection (a) shall be included in the budget for the project and need not be
18 included in the contractor's bid.

19 **31-47.3-6. Severability.** -- If any clause, sentence, paragraph, section or part of this act
20 shall be adjudged by any court of competent jurisdiction to be invalid and after exhaustion of all
21 further judicial review, the judgment shall not affect, impair or invalidate the remainder thereof,
22 but shall be confined in its operation to the clause, sentence, paragraph, section or part of this act
23 directly involved in the controversy in which the judgment shall have been rendered.

24 SECTION 2. Sections 31-47.3-2 and 31-47.3-3 of the General Laws in Chapter 31-47.3
25 entitled "The Diesel Emissions Reduction Act" are hereby amended to read as follows:

26 **31-47.3-2. Definitions.** -- When used in this chapter:

27 (1) "Best available retrofit technology" means technology, verified by the United States
28 Environmental Protection Agency or California Air Resources Board (CARB) for achieving
29 reductions in particulate matter emissions at the highest classification level for diesel emission
30 control strategies that is applicable to the particular engine and application. Such technology shall
31 not result in a net increase in nitrogen oxides.

32 (2) "Heavy duty vehicle" or "vehicle" means any on-road ~~or nonroad~~ vehicle powered by
33 diesel fuel and having a gross vehicle weight of greater than fourteen thousand (14,000) pounds,
34 or in the case of a nonroad vehicle, powered by diesel fuel and an engine with a rating of at least

1 [seventy-five \(75\) horsepower.](#)

2 (3) "Director" refers to the director of the department of environmental management
3 (DEM).

4 (4) "Level 1 control" means a verified diesel emission control device that achieves a
5 particulate matter (PM) reduction of twenty-five percent (25%) or more compared to uncontrolled
6 engine emissions levels.

7 (5) "Level 2 control" means a verified diesel emission control device that achieves a
8 particulate matter (PM) emission reduction of fifty percent (50%) or more compared to
9 uncontrolled engine emission levels.

10 (6) "Level 3 control" means a verified diesel emission control device that achieves a
11 particulate matter (PM) emission reduction of eighty-five percent (85%) or more compared to
12 uncontrolled engine emission levels, or that reduces emissions to less than or equal to one one-
13 hundredth (0.01) grams of (PM) per brake horsepower-hour. Level 3 control includes repowering
14 or replacing the existing diesel engine with an engine meeting US EPA's 2007 Heavy-duty
15 Highway Diesel Standards, [published in the federal register at 66 Fed. Reg. 5001 \(January 18,](#)
16 [2001\)](#), or in the case of a nonroad engine, an engine meeting the US EPA's Tier 4 Nonroad Diesel
17 Standards, [published in the federal register at 69 Fed. Reg. 38957 \(June 19, 2004\)](#).

18 (7) "Closed crankcase ventilation system (CCV)" means a system that separates oil and
19 other contaminant from the blow-by gases and routes the blow-by gases into a diesel engine's
20 intake system downstream of air filter.

21 (8) "Full-sized school bus" means a school bus, as defined in (Rhode Island general law)
22 section (31-1-3), which is a type 1 diesel school bus, including spare buses operated by or under
23 contract to a school district, but not including emergency contingency vehicles or low usage
24 vehicles.

25 (9) "Model year 2007 emission standards" means engine standards promulgated by the
26 federal Environmental Protection Agency in 40 CFR Parts 69, 80 and 86.

27 (10) "Verified emissions control device" means a device that has been verified by the
28 federal Environmental Protection Agency or the California Air Resources Board to reduce
29 particulate matter emissions by a given amount.

30 [\(11\) "Ultra low sulfur diesel fuel" means diesel fuel having sulfur content of fifteen parts](#)
31 [per million \(15ppm\) of sulfur or less, as defined by the U.S. Environmental Protection Agency at](#)
32 [40 CFR section 80.520.](#)

33 [\(12\) "State agency" means each state board, commission, department, or officer, other](#)
34 [than the legislature or the courts, authorized by law to make rules or to determine contested cases.](#)

1 (13) "State authority" means each of the following: the Rhode Island industrial building
2 authority, the Rhode Island recreational building authority, the Rhode Island port authority and
3 economic development corporation, the Rhode Island industrial facilities corporation, the Rhode
4 Island refunding bond authority, the Rhode Island housing and mortgage finance corporation, the
5 Rhode Island solid waste management corporation, the Rhode Island public transit authority, the
6 Rhode Island student loan authority, the Howard development corporation, the water resources
7 board, the Rhode Island health and educational building corporation, the Rhode Island higher
8 education assistance authority, the Rhode Island turnpike and bridge authority, the Blackstone
9 Valley district commission, the Narragansett bay water quality management district commission,
10 their successors and assigns, and any body corporate and/or politic with the power to issue bonds
11 and notes, which are direct, guaranteed, contingent, or moral obligations of the state, which is
12 hereinafter created or established in this state.

13 (14) "Public works contract" means a contract with a state agency or a state authority for
14 a construction program or project involving the construction, demolition, restoration,
15 rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation,
16 roadway, park or bridge; a contract with a state agency or a state authority regarding the
17 preparation for any construction program or project involving the construction, demolition,
18 restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel,
19 excavation, roadway, park or bridge; or a contract with a state agency or a state authority for any
20 final work involved in the completion of any construction program or project involving the
21 construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any
22 building, structure, tunnel, excavation, roadway, park or bridge.

23 (15) "Contractor" means any person contracting directly or indirectly with a state agency
24 or authority to provide labor, services, materials and/or equipment for the performance of a public
25 works contract. Contractor includes a prime contractor, subcontractor, and any contractor(s) hired
26 by such subcontractor.

27 (16) "CMAQ" means the federal congestion mitigation and air quality improvement
28 program, reauthorized by congress in 2005 by Sections 1101, 1103 and 1808 of the safe,
29 accountable, flexible, efficient transportation equity act: a legacy for users (SAFETEA-LU) (Pub.
30 L. 109-59, Aug. 10, 2005). SAFETEA-LU requires states and metropolitan planning
31 organizations to give priority in distributing CMAQ funds for diesel engine retrofit projects, as
32 well as other cost-effective emission reduction and congestion mitigation activities that benefit air
33 quality.

34 (17) "DERA" means the federal diesel emission reduction act, enacted by congress as

1 [sections 791—797 of the energy policy Act of 2005 \(Pub. L. 109–58, Aug. 8, 2005\).](#)

2 **31-47.3-3. Reducing emissions from school buses.** – (a) Purpose. - To reduce health
3 risks from diesel particulate matter (DPM) to Rhode Island school children by significantly
4 reducing tailpipe emissions from school buses, and preventing engine emissions from entering the
5 passenger cabin of the buses.

6 (b) Requirements for Rhode Island school buses:

7 (i) By September 1, 2010, no full-size school bus with an engine model year 1993 or
8 older may be used to transport school children in Rhode Island; and,

9 (ii) Providing there is sufficient federal or state monies, by September 1, 2010, all full
10 sized school buses transporting children in Rhode Island must be retrofitted with a closed
11 crankcase ventilation system and either:

12 (A) be equipped with a Level 1, Level 2, or Level 3 device verified by the US
13 Environmental Protection Agency or the California Air Resources Board; or

14 (B) be equipped with an engine of model year 2007 or newer; or

15 (C) achieve the same or higher diesel PM reductions through the use of an alternative fuel
16 such as compressed natural gas verified by CARB/EPA to reduce DPM emissions at a Level
17 equivalent to or higher than subsection (B) above.

18 (c) Financial assistance to defray costs of pollution reductions called for in (b)(ii):

19 (i) ~~DEM~~ [The director](#) shall work with the Rhode Island department of transportation or
20 other authorized ~~transit~~ agencies to maximize the allocation of federal ~~congestion mitigation and~~
21 ~~air quality (CMAQ) money for Rhode Island~~ [grant and loan monies provided for Rhode Island](#)
22 [pursuant to CMAQ and DERA](#) for diesel emissions reductions in federal FY 2008 and thereafter
23 until the retrofit goals in this act are met. ~~The (CMAQ) program is jointly administered by the~~
24 ~~federal highway administration (FHWA) and the federal transit administration (FTA), and was~~
25 ~~reauthorized by congress in 2005 under the safe, accountable, flexible, and efficient~~
26 ~~transportation equity act: A legacy for users (SAFETEA LU). The (SAFETEA LU) requires~~
27 ~~states and MOPs to give priority in distributing CMAQ funds to diesel engine retrofits, and other~~
28 ~~cost-effective emission reduction and congestion mitigation activities that benefit air quality.~~

29 (ii) Drawing upon any available federal or state monies, the ~~Director~~ [director](#) shall
30 establish and implement a system of providing incentives consistent with this section to
31 municipalities, vendors, or school bus owners for the purchase and installation of any
32 CARB/EPA-verified emission control retrofit device together with the purchase and installation
33 of closed crankcase ventilation system (CCV) retrofit device. ~~In 2007, the per unit incentive shall~~
34 ~~not exceed one thousand two hundred fifty dollars (\$1,250) for a Level 1 device plus a CCV, or~~

1 ~~two thousand five hundred dollars (\$2,500) for a Level 2 device plus a CCV, or for model years~~
2 ~~2003-2006 five thousand dollars (\$5,000) for a Level 3 device plus a CCV. Incentive Levels may~~
3 ~~be reevaluated annually, with the goal of maintaining competition in the market for retrofit~~
4 ~~devices.~~ To the extent practicable, in kind services will also be utilized to offset some of the costs.

5 The director shall have the authority to determine the incentive levels to take advantage of
6 changing technology and cost fluctuations. Incentive recipients must also certify that newly
7 purchased or retrofitted buses with a Level 3 technology will operate in the state of Rhode Island
8 for a minimum of four (4) years.

9 (d) Priority provisions:

10 (i) When penalty funds, state SEP funds, federal funds, or funds from other state or non
11 state sources become available, ~~these should first be allocated toward further offsetting costs of~~
12 ~~achieving "best available" emissions control in "priority communities";~~ for use under subsection
13 (c), these shall be allocated by the director as follows:

14 (A) First, for control of emissions from school buses owned by Rhode Island
15 municipalities and operating primarily in priority communities;

16 (B) Next, for control of emissions from school buses owned by Rhode Island
17 municipalities but not operating primarily in priority communities;

18 (C) Next, for control of emissions from school buses not owned by Rhode Island
19 municipalities and operating primarily in priority communities; and

20 (D) Last, for control of emissions from school buses not owned by Rhode Island
21 municipalities and not operating primarily in priority communities.

22 (ii) ~~The~~ For purposes of this section, the "best available" standard of subdivision 31-47.3-
23 2(1) is deemed attained by all new buses ~~(MY2007 model year 2007 and newer;)~~ and; by diesel
24 buses model year 2003 to 2006, inclusive that ~~has~~ have been retrofitted with Level 3-verified
25 diesel particulate filters and closed crankcase ventilation systems; ; by diesel buses model year
26 1994 to 2002, inclusive that ~~has~~ have been retrofitted with at least Level 2-verified diesel
27 particulate filters and closed crankcase ventilation systems ~~or could be achieved with a natural~~
28 ~~gas bus; and by natural gas buses~~ that achieves the same or better ~~standards of cleanliness~~
29 emissions standards as a 2007 ~~diesel bus standard; and~~ model year diesel bus.

30 (iii) "Priority communities" ~~(to be identified by the Rhode Island DEM)~~ are Rhode Island
31 communities that have high Levels of ambient air pollution and high incidence of childhood
32 respiratory impacts, as determined by the director.

33 (e) To achieve the pressing public health and environmental goals of this act, DEM
34 shall identify opportunities to maximize PM reductions from diesel powered heavy duty

1 vehicle or equipment that is owned by, operated by, or on behalf of, or leased by, or operating
2 under a ~~contact~~ contract to a state agency or state ~~regional public~~ authority (except vehicles that
3 are specifically equipped for emergency response) and diesel powered waste collection and
4 recycling vehicles that are owned, leased, or contracted to perform the removal or transfer or
5 municipal, commercial or residential waste, or recycling services. No later than January 1, 2008,
6 DEM shall present a report to the general assembly, governor, house committee on environment
7 and natural resources, and the senate committee on environment and agriculture on such
8 opportunities to maximum PM reductions from the aforementioned fleets including legislative
9 changes, regulatory changes, funding sources, contract requirements, procurement requirements,
10 and other mechanisms that will bring about maximum PM reductions from these two priority
11 fleets. This report shall explore funding sources beyond CMAQ, including but not limited to
12 Diesel Reductions Emissions Reduction Act (DERA) funds under the Federal Energy Act.

13 (f) Severability. - If any clause, sentence, paragraph, section or part of this act shall be
14 adjudged by any court of competent jurisdiction to be invalid and after exhaustion of all further
15 judicial review, the judgment shall not affect, impair or invalidate the remainder thereof, but shall
16 be confined in its operation to the clause, sentence, paragraph, section or part of this act directly
17 involved in the controversy in which the judgment shall have been rendered.

18 SECTION 3. This act shall take effect upon passage.

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EXPLANATION
BY THE LEGISLATIVE COUNCIL
OF
A N A C T
RELATING TO MOTOR AND OTHER VEHICLES - THE DIESEL EMISSIONS
REDUCTION ACT

- 1 This act would establish certain requirements relative to the government's responsibility
- 2 to protect the public health from diesel pollution.
- 3 This act would take effect upon passage.

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