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STATE OF RHODE ISLAND

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2008

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A N A C T

RELATING TO MOTOR AND OTHER VEHICLES - DIESEL EMISSIONS REDUCTION
ACT

Introduced By: Senators Moura, Bates, Sosnowski, Maselli, and Miller

Date Introduced: February 26, 2008

Referred To: Senate Environment & Agriculture

It is enacted by the General Assembly as follows:

1 SECTION 1. Sections 31-47.3-2 and 31-47.3-3 of the General Laws in Chapter 31-47.3
2 entitled "The Diesel Emissions Reduction Act" are hereby amended to read as follows:

3 **31-47.3-2. Definitions.** – When used in this chapter:

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

9 (2) "Heavy duty vehicle" or "vehicle" means any on-road or nonroad vehicle powered by
10 diesel fuel and having a gross vehicle weight of greater than fourteen thousand (14,000) pounds.

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

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

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

1 (6) "Level 3 control" means a verified diesel emission control device that achieves a
2 particulate matter (PM) emission reduction of eighty-five percent (85%) or more compared to
3 uncontrolled engine emission levels, or that reduces emissions to less than or equal to one one-
4 hundredth (0.01) grams of (PM) per brake horsepower-hour. Level 3 control includes repowering
5 or replacing the existing diesel engine with an engine meeting US EPA's 2007 Heavy-duty
6 Highway Diesel Standards, or in the case of a nonroad engine, an engine meeting the US EPA's
7 Tier 4 Nonroad Diesel Standards, [published in the federal register at 69 Fed. Reg. 38959 \(June](#)
8 [29, 2004\)](#).

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

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

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

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

21 [\(11\) "Ultra low sulfur diesel fuel" means diesel fuel having sulfur content of fifteen](#)
22 [thousandths percent \(.0015%\) of sulfur or less, as defined by the U.S. Environmental Protection](#)
23 [Agency at 40 CFR section 80.520.](#)

24 **31-47.3-3. Reducing emissions from school buses.** – (a) Purpose. - To reduce health
25 risks from diesel particulate matter (DPM) to Rhode Island school children by significantly
26 reducing tailpipe emissions from school buses, and preventing engine emissions from entering the
27 passenger cabin of the buses.

28 (b) Requirements for Rhode Island school buses:

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

31 (ii) Providing there is sufficient federal or state monies, by September 1, 2010, all full-
32 sized school buses transporting children in Rhode Island must be retrofitted with a closed
33 crankcase ventilation system and either: (A) be equipped with a level 1, level 2, or level 3 device
34 verified by the US Environmental Protection Agency or the California Air Resources Board; or

1 (B) be equipped with an engine of model year 2007 or newer; or (C) achieve the same or higher
2 diesel PM reductions through the use of an alternative fuel such as compressed natural gas
3 verified by CARB/EPA to reduce DPM emissions at a level equivalent to or higher than
4 subsection (B) above.

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

6 (i) DEM shall work with the Rhode Island department of transportation or other
7 authorized transit agencies to maximize the allocation of federal congestion mitigation and air
8 quality (CMAQ) money for Rhode Island for diesel emissions reductions in federal FY 2008 and
9 thereafter until the retrofit goals in this act are met. The (CMAQ) program is jointly administered
10 by the federal highway administration (FHWA) and the federal transit administration (FTA), and
11 was reauthorized by congress in 2005 under the safe, accountable, flexible, and efficient
12 transportation equity act: A legacy for users (SAFETEA-LU). The (SAFETEA-LU) requires
13 states and MPOs to give priority in distributing CMAQ funds to diesel engine retrofits, and other
14 cost-effective emission reduction and congestion mitigation activities that benefit air quality.

15 (ii) Drawing upon any available federal or state monies, the director shall establish and
16 implement a system of providing incentives consistent with this section to municipalities,
17 vendors, or school bus owners for the purchase and installation of any CARB/EPA-verified
18 emission control retrofit device together with the purchase and installation of closed crankcase
19 ventilation system (CCV) retrofit device. ~~In 2007, the per unit incentive shall not exceed one~~
20 ~~thousand two hundred fifty dollars (\$1,250) for a level 1 device plus a CCV, or two thousand five~~
21 ~~hundred dollars (\$2,500) for a level 2 device plus a CCV, or for model years 2003-2006 five~~
22 ~~thousand dollars (\$5,000) for a level 3 device plus a CCV. Incentive levels may be reevaluated~~
23 ~~annually, with the goal of maintaining competition in the market for retrofit devices.~~ To the
24 extent practicable, in kind services will also be utilized to offset some of the costs. The
25 department shall have the authority to determine the incentive levels to take advantage of
26 changing technology and cost fluctuations. Incentive recipients must also certify that newly
27 purchased or retrofitted buses with a level 3 technology will operate in the state of Rhode Island
28 for a minimum of four (4) years.

29 (d) Priority community provision:

30 (i) When penalty funds, state SEP funds, federal funds, or funds from other state or non-
31 state sources become available, these should first be allocated toward further offsetting costs of
32 achieving "best available" emissions control in "priority communities";

33 (ii) The "best available" standard is attained by all new buses (MY2007 and newer) and
34 by diesel buses model year 2003 to 2006, inclusive that has been retrofitted with level 3-verified

1 diesel particulate filters and closed crankcase ventilation systems, by diesel buses model year
2 1994 to 2002, inclusive that has been retrofitted with at least level 2-verified diesel particulate
3 filters and closed crankcase ventilation systems or could be achieved with a natural gas bus that
4 achieves the same or better standards of cleanliness as a 2007 diesel bus standard; and

5 (iii) "Priority communities" (to be identified by the Rhode Island DEM) are Rhode
6 Island communities that have high levels of ambient air pollution and high incidence of childhood
7 respiratory impacts.

8 To achieve the pressing public health and environmental goals of this act, DEM shall
9 identify opportunities to ~~achieve~~ maximize PM reductions from diesel powered heavy duty
10 ~~vehiele~~ vehicles or equipment that is owned by, operated by, or on behalf of, or leased by, or
11 operating under a contract to a state agency or quasi state agency ~~or regional public authority~~
12 (except vehicles that are specifically equipped for emergency response) and diesel powered waste
13 collection and recycling vehicles that are owned, leased, or contracted to perform the removal or
14 transfer or municipal, commercial or residential waste, or recycling services. No later than
15 January 1, 2008, DEM shall present a report to the general assembly, governor, house committee
16 on environment and natural resources, and the senate committee on environment and agriculture
17 on such opportunities to maximum PM reductions from the aforementioned fleets including
18 legislative changes, regulatory changes, funding sources, contract requirements, procurement
19 requirements, and other mechanisms that will bring about maximum PM reductions from these
20 two priority fleets. This report shall explore funding sources beyond CMAQ, including but not
21 limited to Diesel Reductions Emissions Reduction Act (DERA) funds under the Federal Energy
22 Act.

23 ~~Severability. If any clause, sentence, paragraph, section or part of this act shall be~~
24 ~~adjudged by any court of competent jurisdiction to be invalid and after exhaustion of all further~~
25 ~~judicial review, the judgment shall not affect, impair or invalidate the remainder thereof, but shall~~
26 ~~be confined in its operation to the clause, sentence, paragraph, section or part of this act directly~~
27 ~~involved in the controversy in which the judgment shall have been rendered.~~

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

30 **31-47.3-1.1. Purpose.** -- This act shall be known and may be cited as "The Diesel
31 Emissions reduction Act of 2008." The general purposes of this act are to:

32 (1) Minimize human exposure to and health risks from diesel pollution between the years
33 2008 and 2015;

34 (2) Reduce health costs, missed school days, lost worker productivity and premature

1 mortality linked to exposure to diesel particulate matter (PM), nitrogen oxides (NOx) and other
2 diesel pollutants;

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

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

8 (5) Achieve health benefits for Rhode Island without requiring appropriations from the
9 general fund by ensuring state contracting and leasing takes advantage of retrofits that are
10 occurring in the marketplace.

11 **31-47.3-4. Use of ultra-low sulfur diesel and emission control technology in new state**
12 **contracts. --- Use of emission control technology in new state contracts. --- Use of emission**
13 **control technology in state vehicles and new state contracts. --**

14 (1)(a) By January 1, 2009, any diesel powered heavy duty vehicle that is owned by,
15 operated by or on behalf of, or leased by or operating under a contract to a state agency or quasi
16 state agency shall be powered by a model year 1994 or newer engine and engines model years
17 between and including 1994-2006 be retrofitted with level 3 verified emissions control devices. If
18 level 3 devices have not been verified for use on particular engines, level 2 verified (if available)
19 or level 1 verified emissions control devices must be required. The procuring agency shall
20 incorporate these emissions reduction requirements into all contract specifications.

21 (b) By July 1, 2009 any diesel powered vehicles and non-road construction equipment
22 with an engine 75 hp and greater purchased by or used for projects or activities contracted by the
23 state agency or quasi state agency shall be required to have the highest level of emissions control
24 equipment available as a contract requirement, which is stipulated in contract specifications by
25 the procuring agency. If level 3 verified emissions control devices have not been verified for use
26 on particular engines, level 2 verified (if available) or level 1 verified must be required. If a
27 level 3 verified emissions control device is required, the non-road construction equipment must
28 use ultra-low sulfur diesel fuel in conjunction with the emissions control device.

29 (c) The emission control technology requirements of subsection 1 herein shall not apply
30 to:

31 (i) any vehicle purchased prior to July 1, 2009, or subject to a lease or public works
32 contract entered into, extended, or renewed prior to July 1, 2009;

33 (ii) vehicles that are specially equipped and used for emergency response, as well as other
34 vehicles that may be operated under a contract for emergency response;

1 (iii) vehicles and equipment dedicated for snow removal and maintenance operations; and
2 (iv) farm equipment.

3 (2) On or before January 1, 2010 and on or before every January 1 thereafter until 2030
4 the procuring agency shall report to the director on the use of the retrofit technology as required
5 under this section. The information in this report shall include, but not be limited to, for each state
6 agency and quasi-public state agency covered by this section:

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

11 (b) the number of such motor vehicles that are equipped with an engine certified to the
12 applicable 2007 United States environment protection agency standard for particulate matter as
13 set forth in section 86.007-11 of title 40 of the code of federal regulations or to any subsequent
14 US EPA standard for particulate matter that is at least as stringent; and

15 (3) On or before March 1, 2010 and each year thereafter the director shall compile all
16 information submitted by state and quasi-state procuring agencies as required by subsection 2
17 above and present a report to the governor and the general assembly.

18 **31-47.3-5. Federal funding.** -- Provided that all full-sized school buses, as defined in
19 Rhode Island general law section 31-47.3-2, transporting children in Rhode Island have been
20 retrofit with diesel emission control devises as specified in section 31-47.3-3, any additional
21 federal or state monies, including, but not limited to, federal CMAQ, federal DERA and any
22 federal or state settlement monies shall be used to retrofit heavy duty vehicles or construction
23 equipment engine year 1994 and later that are owned by, operated by or on behalf of, or leased by
24 or operating under contract to a state agency or quasi-public state agency with Level 3 control
25 technology as specified in section 4 of this chapter. Heavy duty vehicles pre-1994 model engines
26 and already owned or contracted by a state agency or quasi-public state agency may be equipped
27 with the best available retrofit technology as defined by section 31-47-3.2 to have achieved
28 CARB or EPA verification. To the extent such funding is available it shall be used to retrofit all
29 such vehicles and equipment.

30 **31-47.3-6. Severability.** -- If any clause, sentence, paragraph, section or part of this act
31 shall be adjudged by any court of competent jurisdiction to be invalid and after exhaustion of all
32 further judicial review, the judgment shall not affect, impair or invalidate the remainder thereof,
33 but shall be confined in its operation to the clause, sentence, paragraph, section or part of this act
34 directly involved in the controversy in which the judgment shall have been rendered.

1 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 - DIESEL EMISSIONS REDUCTION
ACT

- 1 This act would expand the diesel emissions reduction act in several regards, including the
- 2 requirement that new state contracts and state vehicles incorporate new technologies and use ultra
- 3 low sulfur diesel fuel.
- 4 This act would take effect upon passage.

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