

**SENATE . . . . . No. 404**

**The Commonwealth of Massachusetts**

PRESENTED BY:

**John A. Hart, Jr.**

*To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:*

The undersigned legislators and/or citizens respectfully petition for the passage of the accompanying bill:

An Act relative to the reduction of particulate emissions from diesel engines.

PETITION OF:

NAME:	DISTRICT/ADDRESS:
John A. Hart, Jr.	First Suffolk
Kay Khan	11th Middlesex
Patricia D. Jehlen	Second Middlesex
Brian P. Wallace	4th Suffolk
Robert A. O'Leary	Cape and Islands
Matthew C. Patrick	3rd Barnstable
Linda Dorcena Forry	12th Suffolk
Martha M. Walz	8th Suffolk
Christine E. Canavan	10th Plymouth
Thomas M. Stanley	9th Middlesex
Alice K. Wolf	25th Middlesex
Thomas M. McGee	Third Essex and Middlesex
Brian P. Wallace	4th Suffolk
Marc R. Pacheco	First Plymouth and Bristol
Linda Dean Campbell	15th Essex
Gale D. Candaras	First Hampden and Hampshire

# The Commonwealth of Massachusetts

In the Year Two Thousand and Nine

## AN ACT RELATIVE TO THE REDUCTION OF PARTICULATE EMISSIONS FROM DIESEL ENGINES.

*Whereas*, The deferred operation for this act would tend to defeat its purpose, which is forthwith to make The deferred operation of this act would tend to defeat its purpose, which is to protect public health from the adverse impacts of particulate emissions from diesel engines, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience., therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience.

*Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:*

1 Chapter 30 of General Laws is hereby amended by adding, after Section 39S, the  
2 following new sections:—

3 Section 39T. Short title. This act shall be known as the "Diesel Emissions Reduction Act of  
4 2009."

5 Section 39U. Legislative findings and purpose.

6 The Legislature hereby finds and declares that:

7 (a) The purpose of this act is to minimize the public health risks from exposure to diesel  
8 particulate emissions as expeditiously as practicable

9 (b) Diesel exhaust particle pollution poses a clear and present health risk to the people of  
10 the Commonwealth. Diesel exhaust is a likely human carcinogen, and a prime  
11 contributor to airborne fine particle pollution that is linked to premature death and  
12 other serious cardiovascular and pulmonary problems such as heart attacks, abnormal  
13 heart rhythms, atherosclerosis, stroke, asthma attacks, permanent respiratory damage  
14 and retardation of lung growth in children.

15 (c) The health impacts from diesel emissions especially affect children, the elderly and  
16 people with weakened immune systems.

17 (d) Particularly high concentrations of diesel emissions often are found in densely  
18 populated, urban areas, disproportionately impacting ethnic minorities and people of  
19 lower economic status.

20 (e) Diesel exhaust also contains black carbon emissions, which contribute to global  
21 climate change.

22 (f) Practical, cost-effective measures to substantially reduce diesel particulate emissions  
23 are available today, and can be applied to many existing diesel engines. The same  
24 technology that limits diesel pollution from new diesel engines can be retrofitted onto  
25 existing engines or applied in new replacement engines to reduce diesel emissions by  
26 85% or better.

27 Section 39V. Definitions.

28 "Best available retrofit technology" means technology, verified by the United States

29 Environmental Protection Agency or California Air Resources Board (CARB) for

30 achieving reductions in particulate matter emissions at the highest classification level for

31 diesel emission control strategies that is applicable to the particular engine and  
32 application. Such technology shall not result in a net increase in nitrogen oxides.

33 “CARB” means the California Air Resources Board.

34 “Certified engine configuration” means a new, rebuilt, or remanufactured engine  
35 configuration—

36 (1) that has been certified or verified by USEPA or CARB;

37 (2) that meets or is rebuilt or remanufactured to a more stringent set of engine emissions  
38 standards, as determined by DEP; and

39 (3) in the case of a certified engine configuration involving the replacement of an  
40 existing engine or vehicle, an engine configuration that replaced an engine that was  
41 removed from the vehicle and returned to the supplier for remanufacturing to a more  
42 stringent set of engine emissions standards or for scrappage.

43 “CMAQ” means the federal Congestion Mitigation and Air Quality Improvement Program  
44 reauthorized by Congress in 2005 by Sections 1101, 1103 and 1808 of the Safe, Accountable,  
45 Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (Pub. L.  
46 109–59, Aug. 10, 2005).

47 “Contractor” means any person that enters into a public works contract with a public  
48 agency, or any person that enters into an agreement with such person or entity, to perform  
49 work or provide labor or services related to such public works contract.

50 “Defective” means a condition in which an emission control system or component is  
51 malfunctioning due to age, wear, mal-maintenance or design defects.

52 “DEP” means the Massachusetts Department of Environmental Protection.

53 “DERA” means the Diesel Emission Reduction Act, enacted by Congress as sections  
54 791—797 of the Energy Policy Act of 2005 (Pub. L. 109–58, Aug. 8, 2005).

55 “Fleet” means one or more diesel vehicles or mobile or stationary diesel engines owned,  
56 controlled or operated by the same person (and by any person that controls, is controlled by, or  
57 has common control with such same person).

58 “Heavy-heavy duty diesel vehicle” means a motor vehicle with a gross vehicle weight  
59 rating of at least 33,000 pounds that is powered by a diesel engine.

60 “Incremental cost” means the cost of a contractor’s actions to comply with the  
61 requirements of section 106(a)(4)(B) and (5)(B) of this act, less the baseline cost that would  
62 otherwise be incurred by the applicant or contractor in the normal course of business.

63 Incremental costs may include added lease or fuel costs as well as capital costs.

64 “Level 1 Control” means a Verified Diesel Emission Control Device that achieves a  
65 particulate matter (PM) emission reduction of 25% or more from uncontrolled engine emission  
66 levels.

67 “Level 2 Control” means a Verified Diesel Emission Control Device that achieves a  
68 particulate matter (PM) emission reduction of 50% or more from uncontrolled engine emission  
69 levels.

70 “Level 3 Control” means a Verified Diesel Emission Control Device that achieves a  
71 particulate matter (PM) emission reduction of 85% or more from uncontrolled engine emission  
72 levels, or that reduces emissions to less than or equal to 0.01 grams of PM per brake

73 horsepower-hour. Level 3 Control includes repowering or replacing the existing diesel engine  
74 with an engine meeting USEPA’s 2007 Heavy-duty Highway Diesel Standards, or in the case  
75 of a nonroad engine, an engine meeting the USEPA’s Tier 4 Nonroad Diesel Standards; Level  
76 3 Control also includes new diesel engines meeting said USEPA emissions standards.

77 “Motor vehicle” means any self-propelled vehicle designed for transporting persons or  
78 property on a street or highway, including an on-road diesel vehicle.

79 “Nonroad engine” means an internal combustion engine (including the fuel system) that  
80 is used in a regulated nonroad vehicle.

81 “PM2.5” means particulate matter that is 2.5 micrometers or smaller in size.

82 “Primarily engaged in interstate commerce” means, with respect to a Regulated Highway  
83 Diesel Vehicle, a vehicle that is not registered in the Commonwealth, is engaged in interstate  
84 commerce, and during its life (or if longer than 3 years, the most recent 3 calendar years) has  
85 operated for more than 50% of its travel miles outside of the Commonwealth, in accordance  
86 with regulations promulgated by DEP pursuant to this act.

87 “Public agency” means a commonwealth, city, county, administration, department,  
88 division, bureau, board or commission, or a corporation, institution or agency of government,  
89 the expenses of which are paid in whole or in part from the public treasury.

90 “Public works contract” means a contract with a public agency for a construction  
91 program or project involving the construction, demolition, restoration, rehabilitation, repair,  
92 renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or  
93 bridge; a contract with a public agency regarding the preparation for any construction program

94 or project involving the construction, demolition, restoration, rehabilitation, repair, renovation,  
95 or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; or a  
96 contract with a public agency for any final work involved in the completion of any construction  
97 program or project involving the construction, demolition, restoration, rehabilitation, repair,  
98 renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or  
99 bridge.

100 “Regulated Highway Diesel Vehicle” means any of the following heavy-heavy duty  
101 diesel vehicles having a model year 1994 through 2006 and operating within the  
102 Commonwealth and not primarily engaged in interstate commerce, all as may be further  
103 defined in an inclusive manner in regulations promulgated by DEP pursuant to this act:

- 104 (1) commercial and transit buses;
- 105 (2) waste haulers;
- 106 (3) highway and other maintenance, construction and other trucks owned by or operated  
107 on behalf of public agencies, including but not limited to dump trucks, graders and  
108 snow plows;
- 109 (4) freight and cargo delivery trucks with central fleet maintenance or fueling locations  
110 within the State; and
- 111 (5) such other 1994-2006 model year heavy-heavy-duty highway diesel vehicles not  
112 primarily engaged in interstate commerce as DEP may designate by regulation.

113 “Regulated Nonroad Vehicle” means a vehicle or equipment operating within the  
114 Commonwealth that is powered by a nonroad engine, seventy-five horsepower and greater, and  
115 that is a crawler, tractor, dozer, backhoe, or skid-steer loader, all as may be further defined in  
116 an inclusive manner in regulations promulgated by DEP pursuant to this act.

117 “Retrofit” means to equip a diesel motor vehicle or nonroad vehicle with new particulate  
118 emissions-reducing parts or technology verified by USEPA or CARB after manufacture of the  
119 original engine.

120 “RMV” means the Massachusetts Registry of Motor Vehicles.

121 “Ultra low sulfur diesel fuel” means diesel fuel that has a sulfur content of no more than  
122 fifteen parts per million.

123 “USEPA” means the United States Environmental Protection Agency.

124 “USEPA’s 2007 Heavy-duty Highway Diesel Standards” means those regulations  
125 promulgated by USEPA and published in the Federal Register at 66 Fed. Reg. 5002 on January  
126 18, 2001.

127 “USEPA’s Tier 4 Nonroad Diesel Standards” means those regulations promulgated by  
128 USEPA and published in the Federal Register at 69 Fed. Reg. 38958 on June 29, 2004.

129 “Verified diesel emission control device” means:

130 (1) an emission control device or strategy that has been verified to achieve a specified  
131 diesel PM reduction by USEPA or CARB; or

132 (2) replacement or repowering with an engine that is certified to specific PM emissions  
133 performance by USEPA or CARB.

134 Section 39W. DEP Regulations.

135 Within one year of the effective date of this act, DEP shall, after written notice and public  
136 hearing, promulgate regulations implementing the provisions of this act.

137 Section 39X. Reduction of on-road diesel emissions.

138 (a) Level 3 Controls required. Except as provided in subsections (b), (c) and (d), on and after  
139 January 1, 2013, no fleet owner or operator shall operate any Regulated Highway Diesel  
140 Vehicle in the Commonwealth unless that vehicle has installed Level 3 controls and unless  
141 such controls are properly maintained and functioning.

142 (b) Existing controls. Any Regulated Highway Diesel Vehicle that has operational  
143 Level 1 Control installed prior to the effective date of this act shall have an additional two  
144 years to meet the requirements of subsection (a), and any Regulated Highway Diesel  
145 Vehicle that has operational Level 2 Control installed prior to the effective date of this act  
146 shall have an additional four years to meet the requirements of subsection (a).

147 (c) Small fleets. Any owner or operator of a fleet or fleets (including for the purpose of this  
148 subsection any fleet or fleets owned or operated by related persons) consisting in the  
149 aggregate of five or fewer Regulated Highway Diesel Vehicles, shall have an additional  
150 two years to comply with the requirements of subsections (a), (b) and (d)(1).

151 (d) Exemptions.

152 (1) Level 2 Controls. Subsection (a) shall not apply to any Regulated Highway Diesel  
153 Vehicle if DEP makes a written finding that no Verified diesel emissions control  
154 device with Level 3 Controls exists for such vehicle, in which case such fleet owner  
155 or operator shall install Level 2 Controls that are available and appropriate for such  
156 vehicle as determined by DEP.

157 (2) Low-use Vehicles. Subsections (a), (b), and (d)(1) shall not apply to any Regulated  
158 Highway Diesel Vehicle whose propulsion engine was operated in the

159 Commonwealth for fewer than 1,000 miles and less than 100 hours during the  
160 preceding calendar year, as confirmed by engine operation data from a properly  
161 functioning odometer and non-resettable hour meter.

162 (3) Emergency Vehicles. Subsections (a), (b), (d)(1) shall not apply to any vehicles that  
163 are specially equipped and operated for emergency response by a state authority,  
164 offices of emergency management, sheriff's office, police department or fire  
165 department.

166 (e) Penalties.

167 (1) Any owner or operator of a Regulated Highway Diesel Vehicle that is found by DEP  
168 to be in noncompliance with this section shall be liable to pay a civil penalty in an  
169 amount assessed by DEP not to exceed \$5,000 per violation, with each day of  
170 noncompliance of each vehicle constituting a separate violation, and may have the  
171 registration of said vehicle revoked by RMV, all in accordance with regulations  
172 promulgated by DEP, and, as appropriate, RMV.

173 (2) Monies collected in penalties will be distributed 50% to the Diesel Emissions  
174 Reduction Fund, 25% to DEP as the enforcing agency, and 25% to the ticketing agency,  
175 i.e. state or local police.

176 (f) Sticker Display. Each regulated highway diesel vehicle subject to the provisions of this  
177 section shall display a compliance sticker clearly and conspicuously indicating its  
178 installed level of emissions control

179 (g) All emissions control technology shall be operated, maintained and serviced as  
180 recommended by the manufacturer.

181 (h) Ultra low sulfur diesel highway fuel required. After the effective date of this act, no  
182 person shall sell, deliver or distribute diesel fuel for diesel motor vehicles within the State  
183 other than ultra-low sulfur diesel fuel, and no person shall operate a diesel motor vehicle  
184 within the State using diesel fuel other than ultra low sulfur diesel fuel.

185 Section 39Y. Public Works Contracts Environmental Performance Specifications.

186 (a) On and after six months following effective date of this act, any solicitation for a public  
187 works contract, and any contract entered into as a result of such solicitation, shall include  
188 the following specifications that all contractors shall comply with in the performance of  
189 such contract:

190 (1) Ultra low sulfur diesel fuel or an ultra low sulfur diesel blend with a sulfur content of  
191 15 ppm or less shall be used in all diesel nonroad vehicles and heavy duty diesel  
192 vehicles;

193 (2) All Regulated Nonroad Vehicles on site for more than three days during the project  
194 shall install and operate:

195 (A) a minimum of Level 1 Controls no later than January 1, 2011; and,

196 (B) Level 3 Controls no later than January 1, 2013;

197 (3) All heavy-heavy duty diesel vehicles on site for more than three days during the  
198 project shall install and operate Level 3 Controls no later than January 1, 2011;

199 (4) Each Regulated Nonroad Vehicle and heavy-heavy duty diesel vehicle on site shall  
200 display a compliance sticker clearly and conspicuously indicating its installed level of  
201 emissions control; and

202 (5) All emissions control technology shall be operated, maintained and serviced as  
203 recommended by the manufacturer.

204 (b) (1) Any public works contract shall provide full or partial reimbursement from the public  
205 works project funds for incremental costs incurred by eligible contractors that are necessary  
206 to bring Regulated Nonroad Vehicle and heavy-heavy duty diesel vehicles used on that  
207 specific project into compliance with the requirements of subsections (2)(A), and (B) and  
208 (3) for that specific project; provided, however, that no reimbursement shall be payable for  
209 costs incurred after 18 months following the applicable compliance date. Each relevant  
210 agency shall establish annually, on January 1<sup>st</sup>, the reimbursement percentage to be applied  
211 to all of its public works contracts for each calendar year beginning in 2010 through 2014.  
212 Eligible contractors shall apply for such reimbursement providing such information as the  
213 public agency shall require. Only one reimbursement shall be provided for each Regulated  
214 Nonroad Vehicle or heavy-heavy duty diesel vehicle; expenditures shall not be eligible for  
215 reimbursement to the extent they were incurred to bring such vehicle into compliance with  
216 a different provision of this act or any other federal or state law or regulation, or if such  
217 expenditures have been previously reimbursed using funds from any other public works  
218 contract or any other public agency, and each application for reimbursement shall include  
219 appropriate contractor certifications concerning these prohibitions.

220 (2) The costs of compliance with subsection (a) that are reimbursed by the public agency  
221 under subsection (b)(1) shall not be included in the project bid or considered by the public  
222 agency in evaluating bids.

223 (c) The public agency entering into a public works contract may elect to provide  
224 reimbursement for retrofits of project Regulated Nonroad Vehicle and heavy-heavy duty  
225 diesel vehicles authorized under subsection (b) in the form of rebates in amounts

226 established by DEP for particular types of vehicles; provided that DEP has established by  
227 regulation applicable policies, procedures and safeguards for such rebates.

228 (d) Any public works contract shall provide for enforcement of the contract provisions  
229 required by subsection (a) and penalties for noncompliance of such provisions.

230 (e) Subsections (a)(2) and (3) shall not apply to a Regulated Nonroad Vehicle or heavy-heavy  
231 duty diesel vehicle where the involved public agency makes a written finding, which is  
232 approved, in writing, by DEP, that no Verified diesel emissions control device with Level 3  
233 Controls exists for such vehicle, in which case the vehicle may operate on the project site  
234 only if it has been retrofit with Level 2 Controls that are available and appropriate for such  
235 vehicle as determined by DEP; provided that if the involved public agency makes a written  
236 finding, which is approved, in writing, by DEP, that no Verified diesel emissions control  
237 device with Level 2 Controls exists for such vehicle, said vehicle may operate on site once  
238 it has been retrofit with such Level 1 Controls that are available and appropriate for such  
239 vehicle as determined by DEP. All findings made pursuant to this subsection and  
240 information relating thereto shall be publicly available, and DEP shall post them on its  
241 website.

#### 242 Section 39Z. Diesel Emissions Reduction Funding Program

243 (a) Fund. The Diesel Emissions Reduction Fund (the "Fund") is hereby established as an  
244 account in the state treasury.

245 (1) The fund shall be administered by the state treasurer for the benefit of the Diesel  
246 Emissions Reduction Funding Program (the "Program") established under this  
247 section.

248 (2) Interest earned on the fund shall be credited to the Fund.

- 249 (3) The Fund consists of: (1) the contributions, fees, and surcharges under: (A)  
250 subsections 5-7 and 9; and (B) penalties and fees deposited in the Fund pursuant with  
251 this act.
- 252 (4) Monies in the Fund may be used only to implement the Program, provided that a  
253 maximum of two per cent of the money in the Fund may be used for administrative  
254 costs incurred by the DEP and the state treasurer. Monies allocated to an eligible  
255 project but not expended in any fiscal year may be carried over to succeeding fiscal  
256 years.
- 257 (5) A surcharge is hereby imposed on the retail sale, lease, or rental of new nonroad  
258 diesel vehicles in an amount equal to one per cent of the sales price or the lease or  
259 rental amount.
- 260 (6) A surcharge is hereby imposed on every retail sale, lease or rental of every heavy  
261 duty diesel vehicle that is of a model year of 1998 or earlier and that is sold or leased  
262 in this state. The amount of the surcharge is 2.5% of the total consideration.
- 263 (7) In addition to the registration fees charged under section 33 of Chapter 90, a  
264 surcharge is hereby imposed on the registration of a heavy duty diesel vehicle under  
265 that section in an amount equal to ten percent of the total fees due for registration of  
266 such vehicle there under. Said surcharges shall be remitted to the state treasurer for  
267 deposit in the Fund.
- 268 (8) The bonding authority is hereby authorized to issue up to \$10,000,000 annually  
269 before 2018 in bonds to be used solely to fund revolving loans to eligible diesel  
270 emission reduction projects as described in this section.

271 (9) The Fund shall also consist of designated monies received by the State under DERA,  
272 CMAQ, environmental penalties assessed by the director, supplemental  
273 environmental project funds, and any other sources of revenue that may hereafter so  
274 be designated.

275 (10)The state treasurer shall adopt any procedures needed for the collection,  
276 administration and enforcement of the surcharge authorized by this subsection, and  
277 shall deposit all surcharges to the credit of the Fund.

278 (b) Establishment and Administration of the Program. DEP, in consultation with the state  
279 treasurer, shall establish by regulations promulgated pursuant to this act the  
280 Massachusetts Diesel Emissions Reduction Funding Program in accordance with this act.

281 (1) DEP shall administer the Program and shall provide grants and low-cost revolving  
282 loans from the Fund, on a competitive basis, to eligible projects to achieve significant  
283 reductions of diesel particulate emissions and/or reduced exposure to diesel  
284 particulate matter.

285 (2) In administering the Program and in accordance with the requirements of this act,  
286 DEP shall:

287 (A) manage Program funds and oversee the Program;

288 (B) produce guidelines, protocols, and criteria for eligible projects;

289 (C) develop methodologies for evaluating project benefits and cost-effectiveness;

290 (D) develop procedures for monitoring whether the emissions reductions projected for  
291 projects awarded grants under this chapter are actually achieved;

292 (E) prepare reports regarding the progress and effectiveness of the Program; and

293 (F) take all appropriate and necessary actions so that emissions reductions achieved  
294 through the Program may be credited by USEPA to the appropriate emissions  
295 reduction objectives in the state implementation plan.

296 (c) Applications.

297 (1) To receive a grant or loan under the Program, the applicant shall submit to DEP  
298 an application at a time, in a manner, and including such information DEP may  
299 require.

300 (2) An application under this subsection shall include--

301 (A) a description of the air quality of the area in which the project fleets will  
302 operate;

303 (B) a description of the project proposed by the applicant, including--

304 i. any certified engine configuration or verified technology proposed to be  
305 used or funded in the project; and

306 ii. the means by which the project will achieve a significant reduction in  
307 diesel emissions;

308 (C) an evaluation of the quantifiable and unquantifiable benefits of the emissions  
309 reductions of the proposed project;

310 (D) an estimate of the cost of the proposed project;

311 (E) a description of the age and expected lifetime control of the equipment to be  
312 used or funded in the proposed project;

313 (F) a description of the diesel fuel available in the areas to be served by the  
314 proposed project, including the sulfur content of the fuel;

315 (G) provisions for the monitoring and verification of the project; and

316 (H) such other information as may be required by DEP.

317 (d) Eligibility.

318 (1) A proposed project must meet the requirements of this section to be eligible for a  
319 grant or loan under the Program.

320 (2) DEP may consider for funding the following types of projects --

321 (A) Installation of a retrofit technology, including any incremental costs of a  
322 repowered or new diesel engine, that significantly reduces particulate  
323 emissions through development and implementation of a certified engine  
324 configuration or a verified diesel emission control device for (i) a bus; (ii) a  
325 medium-duty truck or a heavy-duty truck; (iii) a commercial marine engine;  
326 (iv) a locomotive; or (v) a nonroad diesel engine or vehicle used in  
327 construction, handling of cargo, including at a port or airport, agriculture,  
328 mining, or energy production; or

329 (B) programs or projects to reduce long-duration idling using verified technology  
330 involving a vehicle or equipment described in subsection (A).

331 (3) In providing a grant or loan under the Program, and subject to the provisions of  
332 subsection (c), DEP shall give priority to otherwise eligible projects that, as  
333 determined by DEP--

334 (A) maximize public health benefits;

335 (B) are the most cost-effective;

336 (C) serve areas (i) with the highest population density;(ii) that are poor air quality  
337 areas, including areas identified by DEP as in nonattainment or maintenance  
338 of national ambient air quality standards for a criteria pollutant, Federal Class

339 I areas; or areas with toxic air pollutant concerns; (iii) that receive a  
340 disproportionate quantity of air pollution from a diesel fleets, including  
341 truckstops, ports, rail yards, terminals, and distribution centers; or (iv) that use  
342 a community-based multistakeholder collaborative process to reduce toxic  
343 emissions;

344 (D) include a certified engine configuration or verified technology that has a long  
345 expected useful life;

346 (E) will maximize the useful life of any certified engine configuration or verified  
347 technology used or funded by the project; and,

348 (F) conserve diesel fuel

349 (4) For a proposed project to be eligible for Program funding, other than a project  
350 involving a marine vessel or engine, not less than 75 percent of vehicle miles  
351 traveled or hours of operation projected for the five years immediately following  
352 the award of a grant must be projected to take place in this state. For a proposed  
353 project involving a marine vessel or engine, the vessel or engine must be operated  
354 in the intercoastal waterways or bays adjacent to this state for a sufficient amount  
355 of time over the lifetime of the project, as determined by DEP, to meet the cost-  
356 effectiveness requirements of subsection (e).

357 (5) Each proposed project must meet the cost-effectiveness requirements of  
358 subsection (e).

359 (6) A proposed project based on the use of a certified engine configuration or verified  
360 technology must document, in a manner acceptable to DEP, a reduction in  
361 particulate emissions of at least 50 percent compared with the baseline emissions

362 adopted by DEP for the relevant engine year and application. After study of  
363 available emissions reduction technologies, after public notice and comment, DEP  
364 may revise the minimum percentage reduction in particulate emissions required  
365 by this subsection to improve the ability of the program to achieve its goals.

366 (7) If a baseline emissions standard does not exist for on-road or non-road diesels in a  
367 particular category DEP, for purposes of this section, shall establish an  
368 appropriate baseline emissions level for comparison purposes.

369 (8) DEP may approve payments to offset the incremental cost, over the expected  
370 lifetime of the vehicle, of the use of qualifying fuel in a on-road or non-road  
371 diesel vehicle if the proposed project as a whole, including the incremental fuel  
372 cost, meets the requirements of this subchapter. DEP shall develop an appropriate  
373 method for converting incremental fuel costs over the lifetime of the non-road  
374 diesel into an initial cost for purposes of determining cost-effectiveness as  
375 required by subsection (e).

376 (e) Cost-effectiveness

377 (1) For purposes of this section, “cost-effectiveness” means the total dollar amount  
378 divided by the total number of tons of particulate matter reduction attributable to  
379 that expenditure. In calculating cost-effectiveness, one-time grants of money at  
380 the beginning of a project shall be annualized using a time value of public funds  
381 or discount rate determined for each project by DEP, taking into account the  
382 interest rate on bonds, interest earned by state funds, and other factors DEP  
383 considers appropriate.

- 384 (2) DEP shall establish reasonable methodologies for evaluating project cost-  
385 effectiveness consistent with subsection (e)(1) and with accepted methods.
- 386 (3) Except as provided by subsection (e)(7), DEP may not award a grant for a  
387 proposed project the cost-effectiveness of which, calculated in accordance with  
388 subsections (e)(1) and (2) and criteria developed thereunder, exceeds \$135,000  
389 per ton of PM10 emissions. This subsection does not restrict DEP authority under  
390 other law to require emissions reductions with a cost-effectiveness that exceeds  
391 \$135,000 per ton.
- 392 (4) DEP may not award a grant that, net of taxes, provides an amount that exceeds the  
393 incremental cost of the proposed project.
- 394 (5) DEP shall adopt guidelines for capitalizing incremental lease costs so those costs  
395 may be offset by a grant under this section.
- 396 (6) In determining the amount of a grant under this section, DEP shall reduce the  
397 incremental cost of a proposed new purchase, lease, retrofit, repower, or add-on  
398 equipment project by the value of any existing financial incentive that directly  
399 reduces the cost of the proposed project, including tax credits or deductions, other  
400 grants, or any other public financial assistance.
- 401 (7) Adjustment of cost-effectiveness. Based upon a study of available emissions  
402 reduction technologies and costs and after public notice and comment, DEP may  
403 change the values of the maximum grant award criteria established in subsection  
404 (e)(3) to account for inflation or to improve the ability of the program to achieve  
405 its goals.

- 407 (a) Reporting. Persons subject to this act, including owners and operators of Regulated  
408 Highway Diesel Vehicles and Regulated Nonroad Vehicles, shall provide such  
409 information, reporting and monitoring as DEP may require by regulations promulgated  
410 pursuant to this act for the purpose of implementing the provisions of this act.
- 411 (b) Equitable Relief Authorized. In addition to other remedies provided in this act, DEP may  
412 seek injunctive relief in any court of competent jurisdiction to enforce any provision of  
413 this act.
- 414 (c) Severability. If any clause, sentence, paragraph, section or provision of this act shall be  
415 adjudged by any court of competent jurisdiction to be invalid, such judgment shall not  
416 affect, impair or invalidate the remainder of this act, but shall be confined in its operation  
417 to the clause, sentence, paragraph, section or provision of this act directly involved in the  
418 controversy in which the judgment shall have been rendered.
- 419 (d) Effective Date. This act shall take effect immediately upon enactment.