THIS IS A COURTESY COPY OF THIS RULE ADOPTION. THE OFFICIAL VERSION IS SCHEDULED TO BE PUBLISHED IN THE AUGUST 6, 2007, NEW JERSEY REGISTER. SHOULD THERE BE ANY DISCREPENCIES BETWEEN THIS TEXT AND THE OFFICIAL VERSION OF THE ADOPTION, THE OFFICIAL VERSION WILL GOVERN.

ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY MANAGEMENT
MOTOR VEHICLE COMMISSION
DEPARTMENT OF THE TREASURY
Diesel Retrofit Program
Joint Adopted Amendments: N.J.A.C. 7:27-14.1, 14.3 through 14.7, 7:27A-3.10, and 7:27B-4.1, 4.3, and 4.4
Joint Adopted New Rules: N.J.A.C. 7:27-14.7 through 14.10, and 7:27-32

Proposed:	December 18, 2006 as 38 N.J.R. 5244(a)
Adopted:	_____by Lisa P. Jackson, Commissioner, Department of Environmental Protection, with respect to N.J.A.C. 7:27-14.1, 14.3 through 14.10 and 32, 7:27A-3.10, and 7:27B-4.1, 4.3, and 4.4; _____ by David A. Ridolfino, Deputy Director, Division of Administration, Department of the Treasury, with respect to N.J.A.C. 7:27-32.24 and 32.25; and _____ by Sharon A. Harrington, Chief Administrator, Motor Vehicle Commission, with respect to N.J.A.C. 7:27-14.7 through 14.10 and N.J.A.C. 7:27-32.4 through 32.6, 32.20 and 32.21
Filed:	_____, as _____, with changes not requiring additional public notice and comment (See N.J.A.C. 1:30-6.3).
Authority:	N.J.S.A. 13:1B-3(e), 13:1D-9, 26:2C-8 et seq., specifically 26:2C-8.4, 8.26 through 8.56, and 39:3-70.2
DEP Docket Number:	22-06-11/559
Effective Date:	
Expiration Date:	Exempt, N.J.A.C. 7:27 and 27B; April 21, 2010, N.J.A.C. 7:27A

The Department of Environmental Protection (Department) is adopting new rules at N.J.A.C. 7:27-32 and amendments to N.J.A.C. 7:27-14, 7:27A-3.10, and 7:27B-4 to establish a program for the retrofitting of certain heavy-duty diesel vehicles and equipment (the Diesel Retrofit Program), as directed by the Diesel Retrofit Law (P.L. 2005, c. 219, N.J.S.A. 26:2C-8.26 et seq., and amended by P.L. 2006, c. 94). As part of the State's diesel initiative, directed at reducing diesel emissions and the health impacts associated with diesel exhaust, the adopted rules have two components: one component provides for the installation of closed crankcase ventilation systems on school buses; and the second component provides for retrofitting the exhaust systems of certain solid waste vehicles, commercial buses, and publicly-owned on-road vehicles and off-road equipment. Any school bus, solid waste vehicle, commercial bus, or publicly-owned on-road vehicle certified by the United States Environmental Protection Agency (USEPA) or

the California Air Resources Board (CARB) to meet the emissions standards for $PM_{2.5}$ for MY 2007 and later engines is exempt from the requirements of the adopted rules. Any off-road equipment rated from 175 to 750 horsepower and certified by the USEPA or CARB to meet a $PM_{2.5}$ emission standard of 0.015 grams per brake horsepower-hour (g/bhp-hr), or, if rated above 750 horsepower and certified to a $PM_{2.5}$ emission standard of 0.03 grams per brake horsepower-hour (g/bhp-hr), phased in from 2011 to 2015 is exempt from the rules.

The rules implement the retrofit requirements of the Diesel Retrofit Law and establish a timetable and procedure for the Department to provide reimbursement for the costs associated with the purchase and installation of the closed crankcase ventilation system or the retrofit devices. The rules also establish a training and certification program for individuals who perform diesel emission inspections and/or who repair diesel vehicles that fail emissions testing under the State's periodic and roadside inspection programs.

Under the Diesel Retrofit Law the Department must adopt rules jointly with the Motor Vehicle Commission (MVC) regarding the installation of closed crankcase ventilation systems, and the training of persons who inspect a vehicle pursuant to the periodic or roadside inspection program or who repair any vehicle because it failed emissions testing under those inspection programs. (See N.J.S.A. 26:2C-8.33(e) and 8.46.) The State Treasurer must adopt, in consultation with the Department, rules relating to reimbursement of the cost of the purchase and installation of the required retrofit devices and closed crankcase ventilation systems. (See N.J.S.A. 26:2C-8.55.) Because the Department is exercising its statutory authority to modify the reimbursement process, the Department is adopting a portion of the rules jointly with Treasury. Therefore, the Department and the Treasury are adopting the within new N.J.A.C. 7:27-32.24 and 32.25, and the MVC and the Department are jointly adopting the within rules at N.J.A.C. 7:27-14.7 through 14.10, 32.4 through 32.6, 32.20 and 32.21.

Summary of Hearing Officer's Recommendation and Agency Response:

Nancy Wittenberg, Assistant Commissioner of the Department's Environmental Regulation program, served as the Hearing Officer at the January 30, 2007 public hearing held at the Department, 401 E. State Street, Trenton, New Jersey. The comment period for the proposal closed on February 16, 2007. The comments received by the Department are summarized and addressed below. The Hearing Officer recommended that the Department adopt the new rules and amendments with the changes described in the response to comments, and the Summary of Agency Initiated Changes, below. The Department has accepted the Hearing Officer's recommendation. A record of the public hearing is available for inspection in accordance with applicable law by contacting:

Department of Environmental Protection
Office of Legal Affairs
Attn: DEP Docket No. 22-06-11/559
PO Box 402
Trenton, NJ 08625-0402

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This rule adoption can be viewed or downloaded from the Department's web site at http://www.state.nj.us/dep.

Summary of Public Comments and Agency Responses:

The following persons submitted comments on the proposal:

1. James Blando, New Jersey Clean Air Council
2. Kevin F. Brown, Engine Control Systems
3. Peter Bruenke, HUSS LLC North America
4. Bradley L. Edgar, Cleaire Advance Emission Controls
5. Larry Gallagher, Atlantic County Utilities Authority
6. Glenn Goldstein, Emisstar
7. Julian Imes, Donaldson Filtration Solutions
8. Ed Hall, Cummins, Metro Power
9. Greg Hallahan, Hallahan Truck Sales of New York
10. Carol Katz, Katz Government Affairs, on behalf of the Bus Association of New Jersey
11. Michael J. Kubas, Foley Power Systems
12. Danielle Savage, Foley Caterpillar
13. Nicky Sheats, Center for the Urban Environment, on behalf of New Jersey Work Environment Council, New Jersey Environmental Justice Alliance, GreenFaith, and New Jersey Environmental Federation
14. Jeff Silver, E Global Solutions

A summary of the comments and the Department's responses follows:

The number(s) in parentheses after each comment identifies the respective commenter(s) listed above.

1. COMMENT: A consensus of industry, public and several State government agencies believes that adopting this rule is a worthwhile step to improve air quality and public health in New Jersey, and strongly supports the diesel retrofit program. (1)

2**. COMMENT:** The commenter supports the regulations and commends the Department in its efforts to facilitate the implementation of the Diesel Retrofit program. (2, 7, 10) The commenter commends the Department for adopting this rule. (4)

3**. COMMENT:** The commenter supports the provisions of the regulations that require the certification of available funds before requiring the installation of retrofits and the provisions of N.J.A.C. 7:27-32.16 that allow for retirement, rebuilding and repowering of an engine as options for a fleet averaging plan. (10)

4**. COMMENT:** The commenter applauds the State Legislature and the Department for recognizing that diesel emissions contribute significantly to fine particulate matter

(PM) concentrations in New Jersey and that this pollution threatens the health of urban residents. (13)
RESPONSE TO COMMENTS 1 THROUGH 4: The Department acknowledges the commenters' support for the rules.

5. **COMMENT**: Do owners of engines affected by the Diesel Retrofit Law have to provide an inventory listing of all engines in their fleet when submitting a fleet plan or just engines to which the retrofit requirements of the rules apply? (11)
RESPONSE: The owners of vehicles and equipment regulated by the adopted rules are required to provide an inventory of all diesel powered, on-road and off-road vehicles and equipment engines in their fleet, pursuant to N.J.S.A. 26:2C-8.34. See N.J.A.C.7:27-32.12(a)1. This inventory is not limited by engine size or vehicle use, nor is it limited to only those vehicles/equipment that the rules require to be retrofitted.

6. **COMMENT**: For the fleet average plan option, what emissions values are to be used for unregulated engines? (11)
RESPONSE: Pursuant to adopted N.J.A.C. 7:27-32.16(d) 4, the owner must submit emissions calculations using the most recent USEPA guidance. The model currently approved by USEPA provides the emissions rates for each engine type and model year. In the case of off-road engines that were manufactured prior to being subjected to Federal emissions standards, this value is typically designated "BASE." The "BASE" designation will ultimately trigger an emission factor for the specific piece of equipment. The current USEPA model can be found at http://www.epa.gov/otaq/nmim.htm.

7. **COMMENT:** What are the defined "urban" areas in the State that will be selected first to perform emissions reductions? (11)
RESPONSE: N.J.A.C. 7:27-32.17(a) prioritizes the Department's review of fleet plans that operate or exist within two miles of an urban center or urban complex. As stated in the proposal summary, 38 N.J.R. at 5260, these areas are consistent with the designations by the State Planning Commission. A list of these areas can be found at http://www.nj.gov/dca/osg/plan/centerslist.shtml.

8**. COMMENT:** Are submittals from urban areas given higher priority? (8)
RESPONSE: The review of fleet plans for fleets located in urban areas are given higher priority in accordance with N.J.A.C. 7:27-32.17(a).

9. **COMMENT:** Are smoke tests refundable to the authorized installer during the installation of a closed crankcase ventilation system, or should smoke tests be included in the cost estimate submission to the State by the equipment owner? (11)
RESPONSE: The closed crankcase ventilation system installation does not require a smoke test pursuant to the adopted installation standards at N.J.A.C. 7:27-32.5. Therefore a smoke test is not a reimbursable installation cost.

10. **COMMENT**: If company-employed mechanics with the requisite experience or certification are indeed required to attend portions of the State-approved course, then the related costs of the courses should be reimbursed by the Department from the Diesel Risk Mitigation Fund. (10)
REPSONSE: Consistent with the Diesel Law at N.J.S.A. 26:2C-8.53, moneys in the Diesel Risk Mitigation Fund can be used only to reimburse for the purchase and installation costs associated with control devices. Therefore, no reimbursement from the Diesel Risk Mitigation Fund will be provided for the required training courses.

11**. COMMENT:** Do the rules allow for reimbursement when an engine is re-powered to a higher level emission standard, rather than installing an after-treatment strategy? (9)
RESPONSE: Under N.J.A.C. 7:27-32.11(b)2 the re-powering of an engine to a higher level of emission standard than the existing engine, in lieu of installing Best Available Retrofit Technology, is eligible for reimbursement, provided the State Legislature specifically appropriates funds for this purpose. The Department will issue guidance once the appropriation is approved.

12**. COMMENT:** Is there an allowance for maintenance costs? (8)
RESPONSE: Pursuant to the Diesel Retrofit Law maintenance costs are not eligible for reimbursement. Eligible and ineligible costs for reimbursement can be found at adopted N.J.A.C. 7:27-32.11.

13. **COMMENT:** Can an authorized installer also be an authorized inspector? (11)
RESPONSE: The inspections required at N.J.A.C. 7:27-32.21 must be conducted by either a licensed Diesel Emission Inspection Center (DEIC) or by specific units within the Motor Vehicle Commission (MVC), depending on the vehicle type. The DEICs are licensed by the MVC to perform inspections on diesel vehicles. If an authorized installer has been licensed as a DEIC, then a certified diesel emissions inspector at the DEIC is allowed to inspect the vehicle to confirm that it complies with the adopted rules.

The MVC licensing requirements can be found at N.J.S.A. 39:8-69. An entity interested in becoming a licensed DEIC should contact MVC at (609)777-1694 for more information.

14. **COMMENT:** How long does an owner have to install the retrofit device once he or she is notified that the application is approved and funds are available? (11)
RESPONSE: The size of the fleet will determine the deadline for the completion of retrofit device installations. Pursuant to N.J.A.C. 7:27-32.18, owners of fleets of fewer than 75 regulated vehicles and pieces of equipment will have 120 days to install the retrofit devices after the owner receives notice from the Department that funding is available to provide reimbursement for the installation and purchase of the retrofit device. Fleets of at least 75 and no more than150 vehicles or pieces of equipment will have 180 days. Fleets with more than 150 vehicles and pieces of equipment will have 270 days.

15. **COMMENT**: Does the authorized installation have to be performed in New Jersey? (9)
RESPONSE: The rules do not restrict the location of the authorized installer or where the installation occurs.

16**. COMMENT**: Will a fleet owner be able to self-install? How does a person become an "authorized installer"? (5, 14)
RESPONSE: In order to be eligible for reimbursement under N.J.A.C. 7:27-32.3(d), a fleet owner must become an authorized installer for each device installed, and must either be on a State Contract if it is a private entity, or have a grant agreement with the State to self-install if it is a public entity. In order to become an authorized installer, an entity must obtain a written agreement from the manufacturer of each retrofit device or closed crankcase ventilation system it will install that the entity represents the manufacturer for the purpose of the sale, installation, repair and/or dispersal of information regarding that retrofit device or closed crankcase ventilation system. A fleet owner who is not on the State Contract or does not have a Grant Agreement may choose to self-install the retrofit device or closed crankcase ventilation system, but he or she is not eligible for reimbursement and therefore must incur the costs associated with the self-installations.

17**. COMMENT**: Will there be a limit to the number of authorized installers? (12)
RESPONSE: The rules do not limit the number of authorized installers. The number of authorized installers will depend on the number of entities with whom the device manufacturers have written agreements, and will be limited to those authorized installers listed on the State Contract or, for public entities, those with a Grant Agreement with the State.

18**. COMMENT:** Is there a process in place for choosing a qualified installer for after-treatment devices? (9)
RESPONSE: The rules do not require a vehicle owner to go to a specific installer, provided the installer is authorized. The State will reimburse the authorized installer for the costs associated with the purchase and installation of the retrofit devices and closed crankcase ventilation systems only if the authorized installer is on a State Contract issued specifically for the purposes of these adopted rules. Therefore, fleet owners will be required to choose authorized installers from the State Contract. The Department will post any relevant information regarding the State Contract award, including a list of approved vendors on its website at http://www.state.nj.us/dep/stopthesoot/. The Department will also provide workshops in the future for all regulated fleet owners to assist them in meeting the requirements of the adopted rules, including guidance for choosing a qualified authorized installer. Notices of these workshops will also be posted on the Department's website.

19. **COMMENT:** Is the State certifying installers? (9)
RESPONSE: See Response to Comment 16, above.

20. **COMMENT:** When will the RFP for authorized installers and inspectors be issued and how do companies get on the RFP list? (11)
21. **COMMENT:** Will the State issue separate contracts for installers and retrofit devices? Will the contract include vendors that do not install the technology. (14)
22. **COMMENT**: Will the public be notified when the request for proposal (RFP) is issued? Can you give us an approximate date? (12)
RESPONSE TO COMMENTS 20 THROUGH 22: The State will be using one contract to include authorized installers and the technology required in the adopted rules. Inquiries regarding the RFP should be directed via email to the state's Purchase Bureau by contacting Manan.Desai@treas.state.nj.us. Please note that no telephone inquiries will be accepted.

Any questions regarding the RFP were to be submitted to the Purchase Bureau by June 4, 2007. Answers to any questions or any addenda to the RFP that occur due to the questions submitted were to be posted after June 4, 2007, but prior to June 19, 2007. The bids for this contract were opened by the Department of Treasury on June 19, 2007 at 2 P.M. Outreach via electronic mail notification and hard copy letters notifying potential bidders of the RFP on the website were sent to interested parties. The Bid Solicitation was also published in New Jersey area newspapers.

23. **COMMENT:** Do closed crankcase ventilation systems have to be a CARB or USEPA verified product? (11, 12)
24. **COMMENT:** The rules should be modified to require that all closed crankcase ventilation systems installed be verified by CARB or USEPA as part of an overall emission control system verification or verified as a closed crankcase ventilation system on its own. (2, 7)

RESPONSE TO COMMENTS 23 AND 24: Closed crankcase ventilation systems are not required to be verified technology. Currently, neither CARB nor USEPA has verified the closed crankcase ventilation system technology as a stand alone emissions control device. CARB and USEPA have indicated, through representatives of the verification programs, that these devices will not be verified on their own, but only in conjunction with an emission control system.

The Department has instituted installation quality requirements at N.J.A.C. 7:27-32.5, and warranty requirements at N.J.A.C. 7:27-32.9, in order to ensure that the closed crankcase ventilation system installed will perform optimally and will be durable. The Department believes that these safeguards are adequate to ensure proper operation of the closed crankcase ventilation system.

25. **COMMENT:** All closed crankcase ventilation systems should be required with tailpipe retrofits and, conversely, closed crankcase ventilation system technology should

be required on all of the other regulated vehicles and equipment where best available retrofit technology (BART) is required. (7)

26. **COMMENT:** The State should amend the rules and pursue a BART 1 USEPA/CARB verified diesel oxidation catalyst (DOC) and closed crankcase ventilation system as a minimum requirement for school buses that are not presently equipped with a factory DOC. (2)

RESPONSE TO COMMENTS 25 AND 26: Because school buses travel relatively few miles per year compared to other diesel vehicles, their contribution to ambient air is not as significant. However, the Legislature recognized that in-cabin exposure to diesel emissions could be significant especially considering that children are a more sensitive population. By requiring closed crankcase ventilation systems on school buses, the Legislature acknowledged the clear link between crankcase emissions and student exposure to in-cabin pollution.

The Diesel Retrofit Law was specific and clear in its intent that a study must be conducted by the Department prior to determining if retrofit technology should be required on school buses to further reduce the risk of student exposure to in-cabin pollutants. If the study determines that tailpipe retrofits would significantly reduce in-cabin exposures, the Department has the authority to issue rules to require the installation of tailpipe retrofit technology on school buses.

For vehicles other than school buses, the focus was on emissions from tailpipe into ambient air. Therefore the Legislature required tailpipe retrofits on certain vehicles. However, the Diesel Retrofit Law also did not provide the Department with the authority to require closed crankcase ventilation systems on regulated vehicles and equipment other than school buses.

27. **COMMENT:** Do closed crankcase ventilation systems have to be labeled as outlined in the rules? (11)

RESPONSE: The Department has not adopted rules requiring labeling on closed crankcase ventilation systems, unlike retrofit devices. The labeling for the retrofit devices is required for the one-time compliance inspection to allow the inspector to readily determine whether the correct retrofit device meeting a specific BART Level is installed. The one-time compliance inspection for the closed crankcase ventilation system does not require label verification, but rather requires that the installation standards prescribed at adopted N.J.A.C. 7:27-32.5 are met.

28. **COMMENT:** Apparently there are no BART 2, CARB or USEPA verified products for engine model years 2003 through 2006. What BART level retrofit devices will refuse trucks be required to use for 2003 through 2006 model engines? (11)

RESPONSE: A review of the CARB and the USEPA verified lists indicates that there are eleven retrofit devices that meet the definition of BART 2 and offer a reduction level greater than 50 percent for varying model years from 2003 to 2007. The BART 2 level is defined as any retrofit device technology that meets a minimum particulate reduction by weight of 50 percent. Examples of existing, certified technology include diesel multi-

stage filters, catalyzed wire mesh filters in combination with a fuel borne catalyst, and actively or passively regenerated diesel particulate filters. A vehicle owner can consider control devices verified at CARB level 2, CARB level 3 and any USEPA device verified at a control level greater than 50 percent to meet the BART 2 level requirements. Accordingly, there are possible retrofit options available for these model years to meet compliance with the adopted rules. In those cases where no technology exists and the owner cannot install a retrofit device at the prescribed BART level, the owner must determine an alternative method for compliance. The fleet owner would develop and submit a fleet plan to the Department for review and approval pursuant to adopted N.J.A.C. 7:27-32.12(a)2ii and 32.14, 32.15 or 32.16, as applicable.

29**. COMMENT:** The Best Available Retrofit Technology (BART) determination for the solid waste sector should be revised from BART 2 to BART 3. There are limited options available for BART 2 technologies, whereas BART 3 technologies are more readily available. Solid waste collection vehicles have the exhaust temperature profiles to correctly operate BART 3 devices, and using BART 3 technologies will result in an increased public health benefit. (3, 4)

RESPONSE: It is not apparent to the Department that solid waste collection vehicles have the exhaust temperature profiles to correctly operate BART 3 devices. Other states' experiences have not shown BART 3 equivalent devices to be the most feasible option for solid waste collection vehicles. The CARB issued a status report ("California Environmental Protection Agency Air Resources Board First Annual Update, Solid Waste Collection Vehicles, Status of Implementation, June 2006") on its mandatory retrofit program for waste collection vehicles that showed that 54 percent of waste collection vehicles were retrofitted with devices at a level less than BART 3, and 24 percent were newly purchased vehicles meeting the 2007 USEPA engine standards. According to the New York State Energy Research and Development Authority, most public on-road vehicles in the State of New York install BART 1 devices where engine temperature is a factor. (See California Air Resources Board. June 2006. First Annual Update Solid Waste Collection Vehicles Status of Implementation. http://www.arb.ca.gov/msprog/swcv/2004swcvreport.pdf.) Representatives of the New York City Department of Sanitation (DSNY) have indicated that even though they targeted segments of the fleet for use of BART 3-equivalent devices, only two-thirds were found to be compatible. The remainder was retrofitted with BART level 1 or 2 equivalent devices.

A BART 2 level means that the solid waste collection vehicle for model years 1988 and newer must have installed a retrofit device that is verified by the USEPA or CARB to reduce fine particulate matter between 50 and 100 percent. The BART 2 level includes devices that are listed by CARB as levels 2 and 3, and any USEPA-verified device listed with a 50 percent or greater reduction efficiency. Some examples of BART 2 included on the CARB and the USEPA list of verified technologies include diesel multi-stage filters, catalyzed wire mesh filters in combination with a fuel borne catalyst, and actively or passively regenerated diesel particulate filters. Please note, consistent

with adopted N.J.A.C. 7:27-32.11, fuels and fuel additives are not eligible for reimbursement. Therefore, a device meeting a BART 3 level can be used for compliance with a BART 2 requirement, as long as that device is applicable to the vehicle.

The Diesel Retrofit Law requires the Department to designate BART that will provide substantial reductions at a reasonable cost. The statute did not require BART to be set at the most stringent level that may be technically achievable, exclusive of cost. The Department established a BART 2 level that is appropriate for solid waste collection vehicles. Since most of the verified devices at a BART 3 level are passively regenerated particulate filters, which require a minimum exhaust temperature in order to operate, these would not be widely feasible for solid waste collection vehicles that characteristically have low exhaust temperature profiles. The BART 3 level requirement in most cases would, therefore, necessitate the use of an actively regenerated particulate filter at a cost three times greater than BART 2.

The Department estimates that requiring BART 3 for solid waste collection vehicles would cost an additional $16.5 million, which exceeds the anticipated retrofit budget. That additional level of funding is not budgeted by the constitutional amendment associated with the Diesel Retrofit Law. Requiring BART 3 for these vehicles may also prevent retrofitting of the later regulated vehicles and equipment, due to the additional costs of BART 3. The funding for reimbursements is limited and received on an annual basis over a 10 year period. Therefore, this additional cost could preclude the Department from approving retrofitting potentially half of the regulated publicly-owned on-road vehicles and off-road equipment.

Another element the Department considered in adopting BART levels was the ability of the retrofit market to meet the demand for retrofit devices. At this time, there is a limited number of service and installation centers in this area with access to actively regenerated particulate filters. The BART 2 level provides a greater variety of feasible devices for timely installation of the retrofit devices within the regulatory timeframes.

The adopted BART level 2 for solid waste collection vehicles is technologically feasible, provides for substantial reductions at reasonable cost, is consistent with the intent of the Diesel Retrofit Law, and allows for the timely installation of the retrofit devices to ensure timely reductions in fine particulate matter. Increasing the BART level will not result in more installations of BART 3, but rather will significantly delay implementation of the rules and the installations of the retrofit devices.

30**. COMMENT:** The rules should be modified to require a BART 3 as the minimum reduction level for publicly owned on-road vehicles. (3)

RESPONSE: See the Response to Comment 29. The Department used the same analysis for determining the BART levels for the publicly owned on-road vehicles as for the solid waste collection vehicles.

31**. COMMENT:** The rules should be modified to maximize particulate matter (PM) reductions in urban areas by requiring all diesel-powered vehicles, regardless of size, that operate in urban areas to install technology to meet the BART 3 level. If a BART 3

device cannot be used, then the vehicle owner should be required to retire vehicles, or, as an alternative approach, use a less stringent level and submit a fleet plan. The Diesel Law does not expressly prohibit the Department from requiring vehicle retirement. (13)
RESPONSE*:* See the responses to Comment 29 and Comment 30. In addition to solid waste collection vehicles and on-road vehicles, fleet owners of commercial buses with engine model years 1993 and older are required to install retrofit technology at levels less than BART 3. This is consistent with the Diesel Retrofit Law, in that the BART 2/BART 1 requirements will result in substantial $PM_{2.5}$ reductions at a reasonable cost. Additionally, since these BART levels are applied to older vehicles, it is not cost effective to install the most costly device on vehicles that will be replaced in a few years. Hence, the most stringent BART level was imposed on the newest model years (1994-2006) because, in most instances, they will be operating on the roadways the longest. Further, while the Diesel Retrofit Law provides for voluntary retirement of a vehicle or equipment for compliance purposes, there is no express authority to mandate that requirement.

32. **COMMENT**: The warranty requirements for vehicles in the rules jump from "70 to 170 horsepower at 60,000 miles" to "300 horsepower at two years and unlimited horsepower." Please clarify what the warranty will be for the missing horsepower range. Has the Department found any vendors that are verified through the California Air Resources Board that are unable to meet the warranty requirements in the rule? (12)
RESPONSE: Table 3 at proposed N.J.A.C. 7:27-32.9(d) listed the incorrect engine size for those on-road use engines with a gross vehicle weight rating (GVWR) greater than 33,000 pounds. The Department is modifying the table on adoption to reflect the appropriate horsepower. As stated in the proposal summary, 38 N.J.R. at 5257, the specific warranty requirements were intended to be the same as CARB's for the retrofit emissions control strategies that it verifies. This revision will ensure, as stated in the proposal summary, that Table 3 will be consistent with CARB's minimum warranty requirements at California Code of Regulations Title 13 Section 2707.

The warranty requirements are a component of CARB's verification process. Therefore, if a vendor is unable to meet CARB's warranty requirements, then that vendor will not receive verification from CARB.

33**. COMMENT**: How will installed retrofit devices affect the warranty status of a particular vehicle or piece of equipment? (5)
RESPONSE: Both the USEPA and CARB verification processes include language within those approvals to protect the warranty status. However, it is in the best interest of the fleet owner to contact the manufacturer directly if any vehicles in his or her fleet are still under warranty and inquire directly about this matter for his or her own assurance.

34**. COMMENT:** Provide some clarification on the warranty information and state whether the engine manufacturer or the vehicle manufacturer warrants the retrofit. Are

the vendors of closed crankcase ventilation systems able to set their own warranties? (8, 12)

RESPONSE: Neither the vehicle manufacturer nor the engine manufacturer is obligated to provide a warranty for the retrofit device or installation, if the manufacturer does not manufacture or install the device.

The manufacturer of the retrofit device or closed crankcase ventilation system and the authorized installer of the retrofit device or closed crankcase ventilation system are required, under N.J.A.C. 7:27-32.9, to provide a minimum warranty for the product, installation and coverage in the event of engine damage.

35. COMMENT: The State should develop cost effectiveness criteria based upon commercial costs related to selected BART products and the actual USEPA or CARB emissions credit values. (2)

RESPONSE: The Department considered cost effectiveness when it adopted the level of BART for each vehicle type listed at N.J.A.C. 7:27-32.8. The Department also considered other factors, such as availability, and feasibility or effectiveness of certain technology on specific engines and uses. The Department's goal was to develop BART levels that would achieve substantial reductions in particulate matter at a reasonable cost.

36. COMMENT: The State should change the rules to reconsider the actual duty cycle requirements of currently verified technology, and consider increasing the current minimum BART 2 standards to the more competitive and cost effective BART 3 standard for those applications where BART 3 products exist and are applicable to the vehicle in question. This revision offers the greatest health benefits to the residents of the State and at a potentially greater cost effectiveness than the less stringent BART 2. (2)

RESPONSE: The Department did consider the cost effectiveness and the actual duty cycle requirements of currently verified technology when defining the presumptive BART levels. For a further description of the criteria used in prescribing the BART levels, please see response to Comment 31.

37**. COMMENT:** The Department should amend N.J.A.C. 7:27-14.8 to allow a mechanic to be exempt from the training course in its entirety if the mechanic has five years of experience, or Automotive Service Excellence (ASE), or original equipment manufacturer training (OEM) certification. (10)

RESPONSE: The Department used the OEM and ASE professional certification requirements as its model when devising the training program for diesel emission repair technicians. The Department will give credit to repair technicians who have five years of documented professional experience in the field of engine and related system repair, pursuant to adopted N.J.A.C. 7:27-14.8(c), for portions of the course that relate to the engine operations and diagnosis. If the individual's experience or certifications are equivalent to the technical portion of the course, he or she will be excused and given credit for that portion of the course and will only be required to complete the New Jersey Specific Informational Course.

In order to be an effective diesel emission repair technician, a person must have a working knowledge of the regulations and test procedures regarding diesel powered motor vehicles that are specific to New Jersey, which are provided in the New Jersey Specific Informational Course. The Department-approved course of instruction for diesel emission repair technicians consists of a New Jersey Specific Informational Course that covers the regulations and test procedures that control emissions from diesel powered vehicles (see N.J.A.C. 7:27-14 and N.J.A.C. 7:27B-4), the Diesel Retrofit Law Requirements, information on New Jersey's diesel emission inspection program, and information on air pollution and its relationship to diesel powered vehicles; and technical information on diesel-powered vehicles that will lead to or is equivalent to professional certifications from original equipment manufacturers and ASE.

38. **COMMENT**: Confirm that the adopted rules allow a bus company already approved by the State to perform self-inspections to inspect the installation of the closed crankcase ventilation system, and do not require the company to take a bus to a stand-alone diesel emission inspection center for verification of the installation of the required retrofit device. (10)

RESPONSE: Whether a bus company is allowed to perform a self-inspection to verify the installation of closed crankcase ventilation system depends on the timing of the installation. In accordance with N.J.A.C. 7:27-32.21, any regulated vehicle that is subject to inspection under the periodic inspection program shall have the vehicle inspected for compliance at the next scheduled annual periodic inspection. Therefore, if a bus company is certified to self-inspect, and the next periodic inspection is a self-inspection, then the one-time compliance inspection can be incorporated into it. However, if the next periodic inspection is not a self-inspection, but is one to be conducted by a State entity, then the one-time compliance inspection must occur at the same time, and be conducted by a State inspector.

39**. COMMENT:** Explain the Department's review of an owner's initial determination of the BART level reduction. (13)

RESPONSE: The Department will conduct an administrative review of all information submitted to ensure it is complete. There is no approval process if an entity is complying with the adopted rules by installing Best Available Retrofit Technologies prescribed for the vehicles or equipment in N.J.A.C. 7:27-32.8, because an added technical review process for all retrofit proposals would slow program implementation, thus delaying the overall environmental benefits. However, consistent with the Diesel Retrofit Law, N.J.S.A. 26:2C-8.26 et. seq., the Department must approve all cost estimates and fleet plan submittals, where fleet plans include fleet averaging plans.

If a fleet owner intends to install a retrofit device that does not meet the prescribed BART, then the owner would submit a fleet plan for each applicable vehicle or equipment. The fleet plan submittal must document the reasons for installing a retrofit device with an emissions reduction less than that prescribed. Fleet averaging plans are submitted if the fleet owner wishes to comply with the rule by implementing emission

reduction opportunities on a combination of regulated and non-regulated vehicles and equipment in the fleet. The approval process associated with fleet plan submittals and cost estimates can be found at N.J.A.C. 7:27-32.17.

40**. COMMENT:** The Department should to give a high priority to the "no idling" section of the diesel emissions reduction law (N.J.S.A. 26:2C-8.26 et. seq.), including outreach to school bus companies and school bus drivers. Financial incentives that return a larger percentage of the no-idling fines to municipalities should also be codified in the rule to help ensure that towns are enforcing no-idling regulations. (13)
RESPONSE: The idling portion of the Diesel Retrofit Law is codified in the Department's rules at N.J.A.C. 7:27-14.1 and 14.3. As to financial incentives for municipalities to enforce the idling rules, any fines issued by local law enforcement are collected and retained by the municipality. Therefore, the amount of idling fines received by the municipalities is directly related to the level of local enforcement of the law.

The Department has undertaken outreach to school bus companies and school district, and has asked school bus drivers and school districts to sign a "no idling pledge," in which the driver voluntarily agrees to turn off the bus engine while waiting for students; and the district agrees to maintain buses to limit visible exhaust, use the newest buses for the longest routes, and train bus drivers on eliminating idling. Further information on the Department's outreach regarding school buses is at www.stopthesoot.org.

41**. COMMENT**: Do the adopted rules apply to replacing older, more-polluting engines with newer, cleaner technology? (9)
RESPONSE: Under N.J.A.C. 7:27-32.8(b), an owner may show compliance by replacing older, more-polluting engines with newer, cleaner technologies provided the replacement results in reductions in fine particulate matter equivalent to that which would have been achieved from the installation of the prescribed BART level technology. The amount of reimbursement is not related to the full re-powering or rebuilding. Rather, reimbursement would be equal to the cost of a retrofit device that provides comparable emissions reductions. The Department will issue guidance on this matter in the future to assist the regulated fleet owners.

42**. COMMENT**: Describe how fleet owners can get involved in this program, including forms to complete, and whether any of the materials are available now. (14)
RESPONSE: Pursuant to N.J.A.C. 7:27-32.12, the fleet owner is required to submit to the Department a fleet inventory, a notice of intent to comply or a fleet plan, and a cost estimate for the specific retrofit devices to be installed.

No forms are available at this time; however, the Department is in the process of developing an electronic system that will include all the necessary forms and information needed to facilitate this process. The Department met with a group of stakeholders to assist in the design of these forms. Anyone interested in joining this stakeholder group should contact the Department at (609) 292-7953. Additionally, the Department will

provide outreach in the future to the regulated entities to educate them on the system and filing procedures. The Department will post any relevant information regarding the future workshops and the electronic system on its website at http://www.state.nj.us/dep/stopthesoot/.

43**. COMMENT**: The Department should provide a summary to the fleet owner explaining the retrofit technologies that can be installed on the vehicles and pieces of equipment. (8)
RESPONSE: The Department will post any relevant information regarding the State Contract award, including a list of approved vendors on its website at http://www.state.nj.us/dep/stopthesoot/. The Department will also provide workshops in the future for all regulated fleet owners to assist them in meeting the requirements of the adopted rules, including guidance for choosing a qualified authorized installer. Notices of these workshops will also be posted on the Department's website. Any interested party may also sign onto the website's list server to receive updates from the program. It is the responsibility of the fleet owner to determine from the State Contract which retrofit or closed crankcase ventilation system, as applicable, is the appropriate device for his or her vehicle or equipment, and to provide this information on forms developed by the Department pursuant to N.J.A.C. 7:27-32.12(a).

44**. COMMENT**: Is there going to be an allowance for NO_x-reducing technologies? (8)
RESPONSE: Pursuant to the Diesel Retrofit Law, the Department was directed to adopt regulations to reduce diesel exhaust and fine particulate matter ($PM_{2.5}$) emissions. The Diesel Retrofit Law did not require the Department to regulate NO_x and, therefore, allowance for NO_x-reducing technologies were not considered in the development of the rules.

45**. COMMENT**: Is there added incentive for voluntarily selecting a higher level technology than is actually required? If the rules state that BART 2 is required, may BART 3 devices be used as well to satisfy the requirement? (6)
RESPONSE: The rules specify a minimum treatment level, so a higher BART level will satisfy a lower prescribed requirement and can be used for compliance purposes. Full reimbursement of the higher level would be issued in this instance. However, if multiple technologies are available and the fleet owner proposes the installation of devices that are substantially more costly than other viable options, the Department may reject the fleet owner's proposal on these grounds but the Department will work with the fleet owner as part of the cost estimate approval process.

46**. COMMENT**: Can you provide an update on the school bus study? Does the Department anticipate future tailpipe emissions control of school buses? (8)
RESPONSE: There is a study underway designed to determine the additional in-cabin $PM_{2.5}$ reductions from retrofit devices on school buses fitted with closed crankcase ventilation systems. If the study results show that retrofit devices contribute

significantly to in-cabin reductions of $PM_{2.5}$ then the Department may require tailpipe retrofits on school buses. However, the Department cannot make any determination until the study is completed. The Department anticipates receiving the study results in or about September 2007.

47**. COMMENT:** What is the status for the schedule for receiving money from the Corporate Business Tax (CBT)? (8)
RESPONSE: In fiscal year 2007, the Department received $21,765,000 in dedicated funds from the CBT. The appropriation for the Diesel Risk Reduction program will amount to $21.6 million in fiscal year 2008, bringing total State appropriations for diesel emissions to over $59 million since the program was initiated in fiscal year 2006. These appropriations are consistent with the Department's projections; therefore, the Department believes the program is running on schedule with respect to the funding from the CBT.

Summary of Agency-Initiated Changes
The Department is modifying N.J.A.C. 7:27-32.12(b)3 on adoption to remove duplicative language.
The Department is modifying N.J.A.C. 7:27-32.12(d) and 32.23(a)2 on adoption to include current contact information for the Department.

Federal Standards Statement

Executive Order No. 27(1994) and P.L. 1995, c. 65 (N.J.S.A. 52:14B-22 et seq.) require State agencies that adopt, readopt or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a comparison with Federal law. The adopted new rules at N.J.A.C. 7:27-32 and adopted amendments at N.J.A.C. 7:27-14, 7:27A-3.10, and 7:27B-4, are not promulgated under the authority of, or in order to implement, comply with or participate in any program established under Federal law or under a State statute that incorporates or refers to Federal law, Federal standards or Federal requirements.

As discussed in the Summary at 38 N.J.R. at 5248, the USEPA has established a technology verification program in support of the Voluntary Diesel Retrofit Program, under which it verifies diesel exhaust emission control strategies for retrofit upon diesel vehicles and equipment. The program establishes an emission reduction value that is achievable when the verified emission control strategy is used in conjunction with a particular vehicle application. The USEPA currently has listed 25 verified emission control strategies for various applications of on- and off-road diesel-powered vehicles and equipment. To the extent that the USEPA-verified controls meet the emissions reduction requirements of the adopted amendments and rules, the adopted amendments and rules allow the use of the USEPA-verified technology to satisfy the retrofit requirements. The USEPA program is not mandatory. Accordingly, the adopted amendments and rules are not inconsistent with a Federal requirement. Thus, Executive

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Order No. 27(1994) and P.L. 1995, c. 65 (N.J.S.A. 52:14B-22 et seq.) do not require a Federal standards analysis.

Full text of the adopted amendments follows (additions to proposal indicated in boldface with asterisks ***thus***; deletions from proposal indicated in brackets with asterisks *[thus]*):

7:27-32.9 Warranty requirements for closed crankcase ventilation systems and retrofit devices

(a) - (d) (No change from proposal.)

Table 3

Minimum Warranty Periods

Engine Type	Engine Size	Minimum Warranty Period
On-road use	70 to 170 horsepower, GVWR *[≤]* ***<*** 19,500 pounds.	Five years or 60,000 miles
	170 to 250 horsepower, GVWR ≥ 19,500 pounds and ≤ 33,000 pounds.	Five years or 100,000 miles
	[170 to 250] ***>250*** horsepower, GVWR > 33,000 pounds.	Five years or 150,000 miles
	>250 horsepower, GVWR > 33,000 pounds, and the truck is: 1. Typically driven more than 100,000 miles per year and 2. Has fewer than 300,000 miles on the odometer at the time of installation	Two years, unlimited miles
Off-road use		
	≥ 50 horsepower	Five years or 4,200 hours

(e) – (f) (No change from proposal.)

7:27-32.12 Required submissions by owner of regulated vehicles and regulated off-road diesel equipment

(a) (No change from proposal.)

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(b) The owner of a regulated vehicle or regulated equipment shall make the submittals required pursuant to (a) above in accordance with the following scheduled:

1. – 2. (No change from proposal.)

3. For private regulated commercial buses, no later than (one year and 180 days after the operative date of these rules), except that no owner of a private regulated commercial bus will be required to comply with this deadline until the owner of public regulated commercial buses has made its submittal. The Department will, on or before (one year and 120 days after the operative date of these rules), place notice on its website at http://www.state.nj.us/dep/stopthesoot/ of any change to the (one year and 180 days after the operative date of these rules) deadline,*[by (one year and 120 days after the operative date of these rules]* and shall extend the deadline by no fewer than 60 days; and

4. (No change from proposal.)

(c) (No change from proposal.)

(d) Forms and information may be obtained by contacting the Department at *[(609) 292-3600]* ***(609) 292-7953*** or visiting the Department's website at http://www.state.nj.us/dep/stopthesoot.

(e) (No change from proposal.)

7:27-32.23 Program support

(a) Any person seeking further information concerning this program or specific technical guidance for the preparation of fleet retrofit plans, combined fleet retrofit plans, and fleet averaging plans required pursuant to this section and any revisions, supplements, or modifications thereto may contact the Department as follows:

1. (No change from proposal.)

2. Write the Department at Diesel Risk Reduction Program, 401 E. State St., P.O. Box *[423]* ***418***,Trenton, NJ *[08625-0423]* ***08625-0418***; or

3. (No change from proposal.)