

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2007

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HOUSE DRH60310-LD-182A (04/10)

Short Title: School Bus Retrofits in Nonattainment Areas. (Public)

Sponsors: Representatives Samuelson, J. Harrell, Martin, and Barnhart (Primary Sponsors).

Referred to:

A BILL TO BE ENTITLED
AN ACT TO REDUCE DIESEL EMISSIONS FROM CERTAIN DIESEL SCHOOL
BUSES REGISTERED IN COUNTIES LOCATED IN AREAS DESIGNATED AS
NONATTAINMENT OR MAINTENANCE FOR OZONE THROUGH THE USE
OF RETROFIT TECHNOLOGY.

The General Assembly of North Carolina enacts:

SECTION 1. Article 21B of Chapter 143 of the General Statutes is amended by adding four new sections to read:

"§ 143-215.107E. Reduction of diesel emissions by retrofitting certain school buses in areas designated as nonattainment or maintenance for ozone.

- (a) Legislative Findings. – The General Assembly makes the following findings:
- (1) Diesel emissions, due in large part to their high concentrations of particulate matter, are associated with severe and multiple health risks to the citizens of North Carolina, including increased risk of cancer, decreased lung function, aggravated asthma, heart attacks, and premature death.
 - (2) The United States Environmental Protection Agency (USEPA), recognizing the harmful effects of diesel emissions, issued new fuel and engine emission standards that will reduce particulate matter emissions from new engines ninety percent (90%) below previous levels, beginning with vehicle model year 2007.
 - (3) The same technology that makes ninety percent (90%) reductions in diesel emissions possible for new engines can be retrofitted onto existing engines.
 - (4) The Safe Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) clarified eligibility for diesel

1 retrofit projects from federal congestion mitigation and air quality
2 improvement program funds appropriated to the State by the United
3 States pursuant to 23 U.S.C. § 104(b)(2) and 23 U.S.C. § 149 and
4 establishes such projects as a priority for funding. North Carolina
5 should act now to position itself to maximize matching dollars
6 available through this program.

7 (b) Definitions. – As used in this section, the following definitions apply:

8 (1) Level 1 Control. – A verified diesel emission control device that
9 achieves a particulate matter (PM) emission reduction of twenty-five
10 percent (25%) or more but less than fifty percent (50%) from
11 uncontrolled engine emissions levels.

12 (2) Level 2 Control. – A verified diesel emission control device that
13 achieves a PM emission reduction of fifty percent (50%) or more but
14 less than eighty-five percent (85%) from uncontrolled engine emission
15 levels.

16 (3) Level 3 Control. – A verified diesel emission control device that
17 achieves a PM emission reduction of eighty-five percent (85%) or
18 more from uncontrolled engine emission levels, or that reduces
19 emissions to less than or equal to 0.01 grams of PM per brake
20 horsepower-hour. Level 3 Control includes repowering or replacing
21 the existing diesel engine with an engine meeting USEPA's 2007
22 Heavy-Duty Highway Diesel Standards published at 66 C.F.R. § 5002
23 (18 January 2001 edition), or, in the case of a nonroad engine, an
24 engine meeting the USEPA's Tier 4 Nonroad Diesel Standards
25 published at 69 C.F.R. § 38958 (29 June 2004 edition). Level 3
26 Control also includes new diesel engines for the 2007 model year or
27 later that meet the emissions standards of reducing PM emissions
28 ninety percent (90%) below previous levels.

29 (4) Verified diesel emission control device. – An emission control device
30 or strategy that has been verified by USEPA or the California Air
31 Resources Board (CARB); or the replacement or repowering the
32 vehicle with an engine that is certified to specific PM emissions
33 performance by USEPA or CARB.

34 (c) Retrofit Certain School Buses. – Any school bus that has a model year 1994
35 through model year 2006 engine, that is registered in a county that is located in an area
36 that is designated by the United States Environmental Protection Agency as
37 nonattainment or maintenance for ozone, that is capable of operating on diesel fuel, and
38 that is used for the transportation of public school students shall be retrofitted in order to
39 utilize retrofit technology as provided in this section. Subject to subsection (d) of this
40 section, the Secretary shall adopt rules to specify procedures for complying with this
41 subsection according to the following schedule:

42 (1) Not less than fifty percent (50%) of school buses subject to this
43 subsection shall have Level 3 Control installed and operational no later
44 than December 31, 2009.

1 (2) All school buses subject to this subsection shall have Level 3 Control
2 installed and operational no later than December 31, 2010.

3 (d) Exceptions. – If the Secretary makes a written finding that a school bus
4 subject to subsection (c) of this section cannot be retrofitted with Level 3 Control, the
5 school bus shall have Level 2 Control, if it is available and appropriate for the school
6 bus, installed and operational. If the Secretary makes a written finding that a school bus
7 subject to subsection (c) of this section cannot be retrofitted with Level 2 or Level 3
8 Control, the school bus shall have Level 1 Control, if it is available and appropriate for
9 the school bus, installed and operational. Further, any school bus that has Level 1
10 Control installed and operational prior to July 1, 2007, shall have an additional two
11 years to meet the requirement under subsection (c) of this section, and any school bus
12 that has Level 2 Control installed and operational prior to July 1, 2007, shall have an
13 additional four years to meet the requirement under subsection (c) of this section.

14 (e) Venting Emissions Prohibited. – No later than December 31, 2009, the
15 venting of crankcase emissions from any school bus shall be prohibited. The installation
16 of equipment that completely closes the crankcase of a diesel engine of a school bus to
17 the atmosphere and routes the crankcase vapor to the engine intake air system or the
18 exhaust system, or by any other equally effective means permitted by rules under this
19 section, is not prohibited under this subsection.

20 (f) Tampered Emission Controls. – No school bus shall operate in the State with
21 tampered, nonconforming, or defective emission control components. No later than
22 October 1, 2009, the Secretary, in consultation with the Department of Transportation,
23 shall, by rule, create and implement a program of inspection of school buses to
24 determine whether emission control components are tampered, conforming, or
25 defective. The rules shall specify at least:

26 (1) An inspection procedure.

27 (2) A periodic inspection frequency of at least once each year.

28 (3) Action the local school administrative unit is required to take to bring
29 any defective, nonconforming, or tampered emission control
30 equipment into compliance.

31 (g) Approval Regarding Retrofits. – The Department may direct the Department
32 of Administration to perform the retrofits under this section or may develop and
33 maintain a list of businesses approved by the Department as being capable of
34 performing retrofits in a satisfactory and uniform manner.

35 (h) Coordination Among Departments. – The Secretary shall coordinate with the
36 Department of Public Instruction, the Department of Transportation, and the
37 Department of Administration to determine if the effective and efficient implementation
38 of this section requires any of these departments to have a role, and if so, the
39 Department of Public Instruction, the Department of Transportation, and the
40 Department of Administration, as applicable, may adopt rules needed to implement this
41 section.

42 **"§ 143-215.107F. School Bus Diesel Emissions Reduction Account.**

43 (a) The School Bus Diesel Emissions Reduction Account is established as a
44 nonreverting account within the Department. The Account shall consist of funds

1 appropriated to it by the General Assembly and the federal congestion mitigation and air
2 quality improvement program funds appropriated to the State by the United States
3 pursuant to 23 U.S.C. § 104(b)(2) and 23 U.S.C. § 149 that are available for diesel
4 retrofits and that are transferred from the Department of Transportation to the Account.

5 (b) Subject to G.S. 143-215.107G, the Department shall use funds in the Account
6 to make grants to local administrative units to reimburse a local school administrative
7 unit for any costs it incurs to retrofit a school bus as required under G.S. 143-215.107E.
8 To administer the grants, the Department and the Department of Public Instruction shall
9 establish procedures for applying for a grant.

10 **"§ 143-215.107G. Penalties.**

11 Any local school administrative unit that is found to be in noncompliance with G.S.
12 143-215.107E shall immediately bring each noncomplying school bus into compliance
13 at its own expense, shall be ineligible to receive funds from the School Bus Diesel
14 Emissions Reduction Account for the costs of bringing any such school bus into
15 compliance, and may have the registration of each such school bus revoked.

16 **"§ 143-215.107H. Report required.**

17 On or before January 1, 2008, and every year through January 1, 2012, the Secretary
18 shall report to the General Assembly, the Environmental Management Commission, and
19 the Environmental Review Commission on the use of retrofit technology to retrofit
20 school buses as required under G.S. 143-215.107E. The information contained in this
21 report shall include, for the Department of Transportation and each local administrative
22 unit:

- 23 (1) The total number of school buses registered in the State.
- 24 (2) The total number of school buses that have the retrofit technology
25 installed and operational under G.S. 143-215.107E, including a
26 breakdown by vehicle model year, engine year, and the type of
27 technology used for each school bus.
- 28 (3) The number of school buses that are equipped with an engine certified
29 to the applicable 2007 USEPA standard for particulate matter as set
30 forth in 40 C.F.R. §§ 86.007 through 86.011 or to any subsequent
31 USEPA standard for particulate matter that is at least as stringent.
- 32 (4) All exceptions and findings made by the Secretary under
33 G.S. 143-215.107E(d).
- 34 (5) Any recommendations for improving the reduction of diesel emissions
35 from school buses and whether the program to retrofit certain school
36 buses registered in a county that is located in an area that is designated
37 by the United States Environmental Protection Agency as
38 nonattainment or maintenance for ozone under G.S. 143-215.107E is
39 accomplishing its purpose to reduce diesel emissions and improve air
40 quality."

41 **SECTION 2.** If any clause, sentence, paragraph, section, or part of
42 G.S. 143-215.107E, 143-215.107F, or 143-215.107G, as enacted by Section 1 of this
43 act, is adjudged by any court of competent jurisdiction to be invalid and after exhaustion
44 of all further judicial review, the judgment shall not affect, impair, or invalidate the

1 remainder thereof, but shall be confined in its operation to the clause, sentence,
2 paragraph, section, or part of the section directly involved in the controversy in which
3 the judgment has been rendered.

4 **SECTION 3.** Within one year of the effective date of this act, the Secretary
5 of Environment and Natural Resources shall:

- 6 (1) Produce guidelines, protocols, and criteria for eligible emission
7 reduction measures and the distribution of grants under
8 G.S. 143-215.107F;
- 9 (2) Develop methodologies for evaluating diesel emission reduction
10 measure benefits and cost-effectiveness under this act;
- 11 (3) Develop procedures for monitoring whether the emissions reductions
12 projected for grants awarded under G.S. 143-215.107F, as enacted by
13 Section 1 of this act, are actually achieved; and
- 14 (4) Take all appropriate and necessary actions so that emissions reductions
15 achieved through this act may be credited by the United States
16 Environmental Protection Agency to the appropriate emissions
17 reduction objectives in the State implementation plan.

18 **SECTION 4.** There is appropriated from the General Fund to the School Bus
19 Diesel Emissions Reduction Account, established in G.S. 143-215.107F, as enacted by
20 Section 1 of this act, the sum of three million four hundred twenty thousand dollars
21 (\$3,420,000) for the 2007-2008 fiscal year and the sum of three million four hundred
22 twenty thousand dollars (\$3,420,000) for the 2008-2009 fiscal year to be used to
23 reimburse local school administrative units for the costs of retrofitting certain school
24 buses as required under G.S. 143-217.107E, as enacted by Section 1 of this act.

25 **SECTION 5.** The Department of Transportation shall transfer the sum of
26 thirteen million seven hundred thousand dollars (\$13,700,000) for the 2007-2008 fiscal
27 year and the sum of thirteen million seven hundred thousand dollars (\$13,700,000) for
28 the 2008-2009 fiscal year from the federal congestion mitigation and air quality
29 improvement program funds appropriated to the State by the United States pursuant to
30 23 U.S.C. § 104(b)(2) and 23 U.S.C. § 149, to the School Bus Diesel Emissions
31 Reduction Account, established in G.S. 143-215.107F, as enacted by Section 1 of this
32 act, to be used as funds to reimburse local school administrative units for the costs of
33 retrofitting school buses as required under G.S. 143-215.107E, as enacted by Section 1
34 of this act.

35 **SECTION 6.** Section 4 and Section 5 of this act become effective July 1,
36 2007. The remainder of this act is effective when it becomes law.