

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2007

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HOUSE BILL 1912
Committee Substitute Favorable 7/11/07
Committee Substitute #2 Favorable 7/19/07

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

Sponsors:

Referred to:

May 2, 2007

A BILL TO BE ENTITLED

1 AN ACT TO ESTABLISH A PILOT PROGRAM TO PROVIDE FUNDS FOR
2 LOCAL SCHOOL ADMINISTRATIVE UNITS TO RETROFIT SCHOOL BUSES
3 IN ORDER TO REDUCE DIESEL EMISSIONS FROM CERTAIN DIESEL
4 SCHOOL BUSES REGISTERED IN COUNTIES LOCATED IN AREAS
5 DESIGNATED AS NONATTAINMENT OR MAINTENANCE FOR OZONE OR
6 PARTICULATE MATTER.
7

8 The General Assembly of North Carolina enacts:

9 **SECTION 1.** Legislative Findings. – The General Assembly makes the
10 following findings:

- 11 (1) Diesel emissions, due in large part to their high concentrations of
12 particulate matter, are associated with severe and multiple health risks
13 to the citizens of North Carolina, including increased risk of cancer,
14 decreased lung function, aggravated asthma, heart attacks, and
15 premature death.
- 16 (2) The United States Environmental Protection Agency, recognizing the
17 harmful effects of diesel emissions, issued new fuel and engine
18 emission standards that will reduce particulate matter emissions from
19 new engines ninety percent (90%) below previous levels, beginning
20 with vehicle model year 2007.
- 21 (3) The same technology that makes ninety percent (90%) reductions in
22 diesel emissions possible for new engines can be retrofitted onto
23 existing engines.
- 24 (4) The Safe Accountable, Flexible, Efficient Transportation Equity Act –
25 A Legacy for Users (SAFETEA-LU), Pub. L. No. 109-59, 119 Stat.
26 1144, 23 U.S.C. § 149, clarified eligibility for diesel matter retrofit
27 projects from federal congestion mitigation and air quality
28 improvement program funds apportioned to the State by the United

1 States pursuant to 23 U.S.C. § 104(b)(2) and establishes those projects
2 as a priority for funding. North Carolina should act now to position
3 itself to maximize eighty percent (80%) federal matching dollars
4 available through this program as provided in 23 U.S.C. § 120.

5 **SECTION 2.(a)** Pilot Program to Retrofit Certain School Buses. – The
6 Department of Environment and Natural Resources, in consultation with the
7 Department of Public Instruction, the Department of Transportation, and stakeholders,
8 shall develop a pilot program, to be administered by the Department of Environment
9 and Natural Resources, to award grants to retrofit school buses in order to reduce diesel
10 emissions from school buses in any county that is located in an area that is designated
11 by the United States Environmental Protection Agency as nonattainment or maintenance
12 for ozone or particulate matter. A local school administrative unit may submit an
13 application to the Department of Environment and Natural Resources for a grant to have
14 any eligible school bus retrofitted in order to utilize an appropriate verified diesel
15 emission control device as determined by the Department of Environment and Natural
16 Resources. A school bus is eligible to have a diesel retrofit using grant funds if the
17 school bus: (i) has a model year 1994 through model year 2006 engine; (ii) is registered
18 in a county that is located in an area that is designated by the United States
19 Environmental Protection Agency as nonattainment or maintenance for ozone or
20 particulate matter; (iii) is capable of operating on diesel fuel and; (iv) is used for the
21 transportation of public school students. The Department of Environment and Natural
22 Resources may adopt guidelines and engineering standards as needed to implement this
23 act. The Department of Environment and Natural Resources shall develop grant
24 application procedures, the criteria and priorities for selecting grant recipients and
25 further selection of which school buses of these grant recipients may use grant funds for
26 diesel retrofits under this pilot program, and procedures for distribution of grant funds
27 and federal-aid funds reimbursed under Section 7 of this act to a local school
28 administrative unit selected as a grant recipient. The criteria that may be considered in
29 grant recipient selection includes the remaining useful life of a school bus and the
30 accumulated mileage and years of service of a school bus. Priority designation for
31 selection of school buses for retrofits using grant funds may be given for a diesel retrofit
32 that results in the greatest particulate matter reduction, considering the costs of
33 operating, maintaining, and repairing the verified diesel emission control device, for the
34 longest remaining useful life of the school bus.

35 **SECTION 2.(b)** Definitions. – As used in this act, the following definitions
36 apply:

- 37 (1) Diesel retrofit. – Defined in Chapter 149 of Title 23 of the United
38 States Code.
- 39 (2) Level 1 Control. – A verified diesel emission control device that
40 achieves a particulate matter emission reduction of twenty-five percent
41 (25%) or more but less than fifty percent (50%) from uncontrolled
42 engine emissions levels.
- 43 (3) Level 2 Control. – A verified diesel emission control device that
44 achieves a particulate matter emission reduction of fifty percent (50%)

1 or more but less than eighty-five percent (85%) from uncontrolled
2 engine emissions levels.

- 3 (4) Level 3 Control. – A verified diesel emission control device that
4 achieves a particulate matter emission reduction of eighty-five percent
5 (85%) or more from uncontrolled engine emission levels, or that
6 reduces emissions to less than or equal to 0.01 grams of particulate
7 matter per brake horsepower-hour. Level 3 Control includes
8 repowering or replacing the existing diesel engine with an engine that
9 meets the United States Environmental Protection Agency 2007 Heavy
10 Duty Highway Diesel Standards set out in the Final Rule published on
11 18 January 2001 in the Federal Register, Volume 66, Number 12,
12 Pages 5002 through 5193. Level 3 Control also includes new diesel
13 engines for the 2007 model year or later that meet the emissions
14 standards that achieve particulate matter emissions reductions that are
15 ninety percent (90%) less than particulate matter emissions standards
16 for diesel engines in the 2006 model year.

- 17 (5) Verified diesel emission control device. – An emission control device
18 or strategy that has been verified by the United States Environmental
19 Protection Agency or the California Air Resources Board; the
20 replacement or repowering of the vehicle with an engine that is
21 certified to specific particulate matter emissions performance by the
22 United States Environmental Protection Agency or the California Air
23 Resources Board; or a device that reduces crankcase emissions by
24 ninety percent (90%) or more from uncontrolled crankcase emissions
25 levels, whether or not the device is verified by United States
26 Environmental Protection Agency or the California Air Resources
27 Board as an emission control device or strategy.

28 **SECTION 2.(c)** Appropriate Retrofit Technology. – Within one year of the
29 effective date of this section, the Secretary of Environment and Natural Resources, in
30 consultation with the Department of Public Instruction, may make a written finding that
31 a model, model year, or any other category concerning the type or use of a school bus
32 that is eligible for a grant under subsection (a) of this section cannot be retrofitted with
33 Level 3 Control, and that the category may use grant funds to be retrofitted with Level 2
34 Control, if it is available and appropriate for the category, installed, and operational.
35 Within one year of the effective date of this section, the Secretary of Environment and
36 Natural Resources, in consultation with the Department of Public Instruction, may make
37 a written finding that a model, model year, or any other category concerning the type or
38 use of a school bus that is eligible for a grant under subsection (a) of this section cannot
39 be retrofitted with Level 2 Control, and that the category may use grant funds to be
40 retrofitted with Level 1 Control, if it is available and appropriate for the category,
41 installed, and operational. The Secretary of Environment and Natural Resources may
42 require additional emissions control to be used for those school buses retrofitted with
43 Level 1 Control using grant funds. Within one year of the effective date of this section,
44 the Secretary of Environment and Natural Resources, in consultation with the

1 Department of Public Instruction, may make a written finding regarding: the
2 comparative economic impact, health benefits, and technological feasibility of using
3 Level 1 Control, Level 2 Control, Level 3 Control, or other verified diesel emission
4 control device under this pilot program; which device results in the greatest emissions
5 reductions, considering the cost of operating, maintaining, and repairing the devices
6 over their anticipated useful life; recommendations regarding the appropriate verified
7 diesel emission control device to be used for retrofits under this pilot program consistent
8 with these findings. In addition to any other issues of retrofit technology considered
9 when making any finding under this subsection, the Secretary of Environment and
10 Natural Resources and the Department of Public Instruction may consider the remaining
11 useful life of a school bus and the accumulated mileage and years of service of a school
12 bus.

13 **SECTION 2.(d) Coordination Among Departments.** – The Department of
14 Environment and Natural Resources shall coordinate with the Department of Public
15 Instruction, the Department of Transportation, and the Department of Administration to
16 determine if the effective and efficient implementation of this pilot program requires
17 any of these departments to have a role beyond any role specified in this act, and if so,
18 the Department of Public Instruction, the Department of Transportation, and the
19 Department of Administration, as applicable, may adopt guidelines and engineering
20 standards as needed to implement this section. The Department of Transportation may
21 amend its Transportation Improvement Program and otherwise satisfy any other
22 requirement under federal law so that school bus retrofits under this pilot program
23 qualify for reimbursement of federal-aid funds as provided under Section 6 of this act.

24 **SECTION 3.(a) School Bus Diesel Emissions Reduction Account**
25 **Established.** – The School Bus Diesel Emissions Reduction Account is established as a
26 nonreverting account within the Department of Environment and Natural Resources.
27 The Account shall consist of funds appropriated to it by the General Assembly and any
28 contributions or grants from public or private sources.

29 **SECTION 3.(b) Permissible Uses of the School Bus Diesel Emissions**
30 **Reduction Account.** – The Department of Environment and Natural Resources shall
31 distribute funds in the School Bus Diesel Emissions Reduction Account as grants to
32 local school administrative units for retrofitting school buses under this pilot program.
33 The distributed funds shall be in an amount that is equal to twenty percent (20%) of the
34 costs of purchasing a diesel retrofit for each school bus selected for retrofitting, based
35 upon the costs of purchasing a diesel retrofit for a school bus as determined by the
36 Department of Environment and Natural Resources. The funds shall be used by the
37 local school unit to match the federal-aid funds that are to be reimbursed under Section
38 6 of this act, provided the Metropolitan Planning Organization for the area in which that
39 local school administrative unit seeking grant funds under this pilot program has
40 amended its Transportation Improvement Program and has otherwise satisfied any
41 requirement under federal law so that the diesel retrofit as it applies to this local school
42 administrative unit qualifies for reimbursement of federal-aid funds as provided under
43 Section 6 of this act. Funds in the School Bus Diesel Emissions Reduction Account
44 shall not be used for any costs associated with any school bus retrofit in excess of the

1 sum of the twenty-percent (20%) share the local school administrative unit received in
2 grant funds under this section for each diesel retrofit and the eighty-percent (80%) share
3 in federal-aid funds for each diesel retrofit. Costs associated with any school bus retrofit
4 in excess of this sum, if any, shall be borne by the local school administrative unit that
5 operates the school bus. Any funds in the School Bus Diesel Emissions Reduction
6 Account that have not been used or obligated as of 1 July 2009 in accordance with this
7 section may be used to make grants to local school administrative units for one hundred
8 percent (100%) of the costs for purchasing a diesel retrofit for a school bus as
9 determined by the Department of Environment and Natural Resources. Funds in the
10 School Bus Diesel Emissions Reduction Account shall not be used for any costs
11 associated with any school bus retrofit in excess of one hundred percent (100%) of the
12 costs for purchasing a diesel retrofit for a school bus as determined by the Department
13 of Environment and Natural Resources, and excess costs associated with any school bus
14 retrofit, if any, shall be borne by the local school administrative unit that operates the
15 school bus.

16 **SECTION 3.(c) Prohibited Uses of the School Bus Diesel Emissions**
17 **Reduction Account.** – Funds in the School Bus Diesel Emissions Reduction Account
18 shall not be used for any school bus with tampered, nonconforming, or defective
19 emission control components.

20 **SECTION 4.(a) Transfer of Information.** – On or before 1 August 2008, the
21 Department of Public Instruction shall submit to the Department of Environment and
22 Natural Resources the following information:

- 23 (1) The total number of school buses that are eligible for grants under
24 Section 2(a) of this act.
- 25 (2) The number of school buses that are equipped with an engine certified
26 to the applicable United States Environmental Protection Agency
27 standard for particulate matter as set out in 40 Code of Federal
28 Regulations §§ 86.007-11 (1 July 2006 Edition).

29 **SECTION 4.(b) Annual Report Required.** – On or before 1 September 2008,
30 and again on or before 1 September 2009, the Department of Environment and Natural
31 Resources shall submit a report to the Department of Public Instruction, the Department
32 of Transportation, and the Environmental Review Commission on the pilot program
33 under this act. This report shall include the information submitted under subsection (a)
34 of this section and shall also include:

- 35 (1) The total number of school buses that have the retrofit technology
36 installed and operational under this pilot program, including a
37 breakdown by location, vehicle model year, engine year, and the type
38 of verified diesel emission control device used for each school bus.
- 39 (2) The anticipated emissions reductions based on the emissions
40 certification of the verified diesel emission control devices used and
41 the annual miles the school buses are expected to drive.
- 42 (3) Any recommendations to further reduce diesel emissions from school
43 buses and whether the program to retrofit certain school buses
44 registered in a county that is located in an area that is designated by the

1 United States Environmental Protection Agency as nonattainment or
2 maintenance for ozone or particulate matter is accomplishing its
3 purpose to reduce diesel emissions, improve air quality, and protect
4 students' health.

5 (4) The feasibility and the cost of expanding the funding for this pilot
6 program for all eligible school buses for local school administrative
7 units in counties that are located in an area that is designated by the
8 United States Environmental Protection Agency as nonattainment or
9 maintenance for ozone or particulate matter.

10 (5) The feasibility and the cost of expanding this pilot program statewide.

11 **SECTION 5.** Credit for Emissions Reductions. – The Department of
12 Environment and Natural Resources shall work together with federal, State, and local
13 air quality and transportation agencies to determine how emissions reductions achieved
14 through implementation of this act may be quantified and credited by the United States
15 Environmental Protection Agency to the appropriate emissions reduction objectives in
16 the State Implementation Plan or Transportation Conformity determinations.

17 **SECTION 6.** Reimbursement of Federal-Aid Funds. – The Department of
18 Transportation may reimburse up to two million dollars (\$2,000,000) for the 2007-2008
19 fiscal year and up to two million dollars (\$2,000,000) for the 2008-2009 fiscal year from
20 the federal congestion mitigation and air quality improvement program funds
21 apportioned to the State of North Carolina by the United States pursuant to 23 U.S.C. §
22 104(b)(2), to the Department of Environment and Natural Resources for the costs of
23 purchasing diesel retrofits for school buses under the pilot program under this act. This
24 reimbursement may provide the eighty percent (80%) in federal-aid funds, as provided
25 in 23 U.S.C. § 120, for the costs of purchasing diesel retrofits for school buses to
26 supplement the funds awarded as grants under Section 3(b) of this act. The Department
27 of Transportation and the Department of Environment and Natural Resources may enter
28 into a contract that provides for the terms and method by which the Department of
29 Environment and Natural Resources bills the Department of Transportation for
30 reimbursement of eligible costs of purchasing diesel retrofits for school buses and
31 submits itemized invoices with proper supporting documentation. This contract may
32 provide a reimbursement schedule.

33 **SECTION 7.** Effective Dates. – Section 6 of this act becomes effective 1
34 July 2007, and the remainder of this act is effective when this act becomes law, but
35 Sections 1 through 6 of this act become effective only if the 2007 General Assembly
36 appropriates funds for the 2007-2009 biennium to the School Bus Diesel Emissions
37 Reduction Account established in Section 3(a) of this act to be used for grants to local
38 school administrative units for the purchase of diesel retrofits for school buses
39 consistent with the pilot program under this act.