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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

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

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

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

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

- 1 (3) Level 2 Control. – A verified diesel emission control device that
2 achieves a particulate matter emission reduction of fifty percent (50%)
3 or more but less than eighty-five percent (85%) from uncontrolled
4 engine emissions levels.
- 5 (4) Level 3 Control. – A verified diesel emission control device that
6 achieves a particulate matter emission reduction of eighty-five percent
7 (85%) or more from uncontrolled engine emission levels, or that
8 reduces emissions to less than or equal to 0.01 grams of particulate
9 matter per brake horsepower-hour. Level 3 Control includes
10 repowering or replacing the existing diesel engine with an engine that
11 meets the United States Environmental Protection Agency 2007 Heavy
12 Duty Highway Diesel Standards set out in the Final Rule published on
13 18 January 2001 in the Federal Register, Volume 66, Number 12,
14 Pages 5002 through 5193. Level 3 Control also includes new diesel
15 engines for the 2007 model year or later that meet the emissions
16 standards that achieve particulate matter emissions reductions that are
17 ninety percent (90%) less than particulate matter emissions standards
18 for diesel engines in the 2006 model year.
- 19 (5) Verified diesel emission control device. – An emission control device
20 or strategy that has been verified by the United States Environmental
21 Protection Agency or the California Air Resources Board; the
22 replacement or repowering of the vehicle with an engine that is
23 certified to specific particulate matter emissions performance by the
24 United States Environmental Protection Agency or the California Air
25 Resources Board; or a device that reduces crankcase emissions by
26 ninety percent (90%) or more from uncontrolled crankcase emissions
27 levels, whether or not the device is verified by United States
28 Environmental Protection Agency or the California Air Resources
29 Board as an emission control device or strategy.

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

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

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

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

31 **SECTION 3.(b)** Permissible Uses of the School Bus Diesel Emissions
32 Reduction Account. – The Department of Environment and Natural Resources shall
33 distribute funds in the School Bus Diesel Emissions Reduction Account as grants to
34 local school administrative units for retrofitting school buses under this pilot program.
35 The distributed funds shall be in an amount that is equal to twenty percent (20%) of the
36 costs of purchasing a diesel retrofit for each school bus selected for retrofitting, based
37 upon the costs of purchasing a diesel retrofit for a school bus as determined by the
38 Department of Environment and Natural Resources. The funds shall be used by the
39 local school unit to match the federal-aid funds that are to be reimbursed under Section
40 6 of this act, provided the Metropolitan Planning Organization for the area in which that
41 local school administrative unit seeking grant funds under this pilot program has
42 amended its Transportation Improvement Program and has otherwise satisfied any
43 requirement under federal law so that the diesel retrofit as it applies to this local school
44 administrative unit qualifies for reimbursement of federal-aid funds as provided under

1 Section 6 of this act. Funds in the School Bus Diesel Emissions Reduction Account
2 shall not be used for any costs associated with any school bus retrofit in excess of the
3 sum of the twenty-percent (20%) share the local school administrative unit received in
4 grant funds under this section for each diesel retrofit and the eighty-percent (80%) share
5 in federal-aid funds for each diesel retrofit. Costs associated with any school bus retrofit
6 in excess of this sum, if any, shall be borne by the local school administrative unit that
7 operates the school bus. Any funds in the School Bus Diesel Emissions Reduction
8 Account that have not been used or obligated as of 1 July 2008 in accordance with this
9 section may be used to make grants to local school administrative units for one hundred
10 percent (100%) of the costs for purchasing a diesel retrofit for a school bus as
11 determined by the Department of Environment and Natural Resources. Funds in the
12 School Bus Diesel Emissions Reduction Account shall not be used for any costs
13 associated with any school bus retrofit in excess of one hundred percent (100%) of the
14 costs for purchasing a diesel retrofit for a school bus as determined by the Department
15 of Environment and Natural Resources, and excess costs associated with any school bus
16 retrofit, if any, shall be borne by the local school administrative unit that operates the
17 school bus.

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

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

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

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

- 37 (1) The total number of school buses that have the retrofit technology
38 installed and operational under this pilot program, including a
39 breakdown by location, vehicle model year, engine year, and the type
40 of verified diesel emission control device used for each school bus.
- 41 (2) The anticipated emissions reductions based on the emissions
42 certification of the verified diesel emission control devices used and
43 the annual miles the school buses are expected to drive.

1 (3) Any recommendations to further reduce diesel emissions from school
2 buses and whether the program to retrofit certain school buses
3 registered in a county that is located in an area that is designated by the
4 United States Environmental Protection Agency as nonattainment or
5 maintenance for ozone or particulate matter is accomplishing its
6 purpose to reduce diesel emissions, improve air quality, and protect
7 students' health.

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

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

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

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

35 **SECTION 7.** Effective Dates. – Section 6 of this act becomes effective 1
36 July 2007, and the remainder of this act is effective when this act becomes law, but
37 Sections 1 through 6 of this act become effective only if the 2007 General Assembly
38 appropriates funds for the 2007-2008 fiscal year to the School Bus Diesel Emissions
39 Reduction Account established in Section 3(a) of this act to be used for grants to local
40 school administrative units for the purchase of diesel retrofits for school buses
41 consistent with the pilot program under this act.