# STATE OF WISCONSIN

#### DEPARTMENT OF TRANSPORTATION OFFICE OF THE SECRETARY

The Wisconsin Department of Transportation adopts an order to create ch. TRANS 135, relating to creation of a school bus oxidation catalyst grant program in certain counties.

# ORDER ADOPTING RULE

# Analysis Prepared by the Wisconsin Department of Transportation

**STATUTORY AUTHORITY**: 2003 Wis. Act 220. Act 220 modifies ss. 20.395(5)(hq) and 110.20(6)(a), Stats., and creates s. 110.215, Stats.

**STATUTES INTERPRETED**: ss. 20.395(5)(hq), 110.20(5) and (6)(a) and 227.114(1), Stats.

Plain Language Analysis: 2003 Wis. Act 220 requires the Wisconsin Department of Transportation, in consultation with the Wisconsin Department of Natural Resources, to develop and administer a program to provide grants for the purchase and installation of oxidation catalysts on school buses customarily kept in the counties identified in s. 110.20(5), Stats.: Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha. Act 220 amends s. 20.395(5)(hq), Stats., to provide funds for the grant program under WisDOT's vehicle inspection/maintenance (I/M) program appropriation.

<u>Summary of, and Preliminary Comparison with, Existing or Proposed Federal</u> <u>Regulation</u>: In the past few years, the U.S. Environmental Protection Agency (USEPA) has issued rules establishing new emission standards for heavy-duty diesel vehicles (including school buses) and engines (including school bus engines) that are effective in 2004 and in 2007. These increasingly stringent emission standards apply to newly manufactured vehicles and engines. According to USEPA, these standards will reduce nitrogen oxide (NOx) and hydrocarbon (HC) emissions from trucks and buses by 95 percent beyond current levels and particulate matter (PM) emissions by 90 percent beyond current levels.

In order to meet these more stringent standards for diesel engines, USEPA's rules also mandate that the sulfur content of diesel fuel be capped at 15 parts per million – a 97 percent reduction over current levels – by 2007.

Oxidation catalysts can reduce PM emissions by 20 percent, HC emissions by 50 percent, and carbon monoxide (CO) by about 40 percent. Consequently, retrofitting school buses manufactured before 2004 with oxidation catalysts will reduce their emissions, but they will still emit substantially more than model year 2004 and newer school buses will.

Because new diesel vehicles will comprise a minority of the national vehicle fleet for several years, USEPA encourages emission control retrofits for existing vehicles.

## Comparison with Rules in Adjacent States:

**Michigan**: Michigan has no rules addressing school bus retrofits or school bus emissions. However, the Michigan Department of Environmental Quality has helped secure federal funds through USEPA's 2004 Clean School Bus USA Demonstration Grants Program to purchase diesel oxidation catalysts for 110 Ann Arbor Public School public school buses, to operate a fleet of 18 school buses on biodiesel B20 (diesel fuel blended with 20 percent biodiesel), and to purchase diesel oxidation catalysts and crankcase filtration systems for 40 to 50 Okemos Public School buses. Collectively, these grants amount to approximately \$165,000.

**Minnesota**: Minnesota has no rules addressing school bus retrofits. However, in May 2002, Minnesota adopted legislation intended to protect the health and safety of children from harmful diesel school bus emissions. The law requires schools to reduce unnecessary idling of school buses in front of schools, and reroute bus parking zones away from air-intake vents (or if necessary, relocate the air-intake vents). In conjunction with the law, the Minnesota Office of Environmental Assistance has coordinated with environmental and health-based organizations to provide resources to schools to help with implementing the law.

Additionally, the South Washington County School District near St. Paul has retrofitted approximately 65 school buses with diesel oxidation catalysts with \$62,225 in supplemental environmental project funds provided by 3M Corporation.

**Illinois**: Illinois has no rules addressing school bus retrofits. However, the state operates a clean school bus grant program administered by the Illinois EPA (IEPA). Under the grant program, IEPA accepts grant applications for purchasing and installing oxidation catalysts and for purchasing other means of reducing school bus emissions, including anti-idling equipment and biodiesel fuel.

Funding for the program comes primarily from two sources: USEPA's Clean School Bus USA Demonstration Grants Program and proceeds of an IEPA enforcement case against Archer Daniels Midland. Funding obtained through the latter is a one-time source of \$2.3 million, but may be used only in twenty-four central and western Illinois counties.

Presently, IEPA has awarded grants to two school districts and is evaluating applications from several others.

**Iowa**: Iowa has no rules addressing school bus retrofits. However, the Iowa Department of Natural Resources (IDNR) has established the Bus Emissions Education Program (BEEP), a voluntary bus emissions testing program. The program is intended to detect emissions and combustion inefficiencies, and thereby help schools save money

by enabling them to properly tune their buses. lowa organizations and businesses provide program funding.

In addition to emissions testing, the IDNR will be partnering with various school districts to install diesel oxidation catalysts on about 125 buses over the next few years, and subsequently fueling them with biodiesel.

<u>Summary of Factual Data and Analytical Methodologies Used and How the</u> <u>Related Findings Support the Regulatory Approach Chosen</u>: In addition to creating the school bus oxidation catalyst retrofit grant program, Act 220 exempts two additional model years from testing in Wisconsin's vehicle emission inspection and maintenance (I/M) program. The underlying legislation, 2003 Senate Bill 436, relied on an analysis provided by the Wisconsin Department of Natural Resources, Bureau of Air Management (DNR).

DNR's analysis indicated that the lost emission reductions associated with the model year exemption could be substantively offset by, among other measures, retrofitting 300 school buses in the program area with oxidation catalysts. DNR's analysis, in turn, relied on bus emission and oxidation catalyst performance information provided by USEPA and oxidation catalyst vendors.

DNR's analysis is considered adequate for this hearing notice given the grant program's limited scope and duration.

<u>Effect on Small Business and, If Applicable, Any Analysis and Supporting</u> <u>Documentation Used to Determine Effect on Small Businesses</u>: None of the equipment vendors known to, or expected to, submit bids for the grant program are small businesses per s. 227.114(1), Stats. A minority of the school bus companies known to, or expected to, participate in the grant program are small businesses.

School buses retrofitted under this rule will experience somewhere between a negligible and modest appreciation in value. Additionally, the program may provide participants with favorable media coverage. On the other hand, participating school bus companies will be required to supply the labor for, or cover the cost of, installing the oxidation catalysts. For most buses, installation will require one to two hours of labor by a qualified mechanic.

On balance, the rule is expected to have no significant effect on business practices or net worth of participating small bus companies. This assessment is based on consultations with diesel oxidation catalyst vendors, affected school bus companies, and representatives of other state grant programs.

<u>Fiscal Effect and Anticipated Costs Incurred by Private Sector</u>: See previous section. The grant program will result in a net benefit to the private sector, as oxidation catalyst vendors will sell additional units and bus companies will receive them free of charge. The grant program is expected to cover the purchase of 300 oxidation catalysts at approximately \$1,000 each.

<u>Copies of Rule</u>: Copies of the rule may be obtained, without cost, by writing to Carson Frazier, Department of Transportation, Bureau of Vehicle Services, Room 253, P. O. Box 7911, Madison, WI 53707-7911. You may also contact Ms. Frazier by phone at (608) 266-7857 or e-mail at carson.frazier@dot.state.wi.us.

## TEXT OF RULE

**SECTION 1**. Chapter Trans 135 is created to read:

#### CHAPTER TRANS 135

#### SCHOOL BUS OXIDATION CATALYST GRANT PROGRAM

Trans 135.01 Purpose and scope. (1) STATUTORY AUTHORITY. As

authorized by s. 110.215, Stats., the purpose of this chapter is to establish the framework for a school bus oxidation catalyst grant program.

(2) APPLICABILITY. This chapter applies to diesel fuel-powered school buses customarily kept, and serving school districts, in the counties identified in s. 110.20(5), Stats.

**Trans 135.02 Definitions**. Words and phrases defined in s. 110.20(1), Stats., have the same meaning in this chapter unless a different definition is specified. In this chapter:

(1) "Department" means the department of transportation.

(2) "Diesel oxidization catalyst" means a device that can be permanently installed along the exhaust train of a diesel vehicle that contains an enclosed catalyst bed over which exhaust gases pass, and that is designed to substantially reduce hydrocarbon, particulate matter and carbon monoxide emissions.

(3) "District" means a school district in one of the counties identified s. 110.20(5),Stats.

(4) "Grant" means a grant to purchase diesel oxidation catalysts.

(5) "Grant program" means the school bus oxidation catalyst grant program described in this chapter.

(6) "School bus company" means a company that owns or leases one or more school buses that are used exclusively or primarily to transport elementary, middle or high school students to and from their schools on a routine basis throughout the school year.

(7) "Vendor" means a company that sells, either directly or through a subsidiary, diesel oxidation catalysts suitable for retrofit installation on diesel fuel powered school buses.

**Trans 135.03 Grant program administration**. (1) GENERAL. The department of natural resources shall be responsible for reviewing grant requests, awarding grants, evaluating vendor products and credentials, and issuing contracts to one or more vendors for the purpose of supplying grant recipients with diesel oxidation catalysts. The department of transportation shall be responsible for establishing the total grant program fund amount, and for providing this amount from the appropriation identified in s. 20.395(5)(hq), Stats.

(2) INTERDEPARTMENTAL COOPERATION. The department of natural resources shall consult with the department of transportation periodically as appropriate during the administration of the grant program. The purpose of the consultations is to provide updates on expenditures and program status and, when necessary, to seek assistance on program-related issues.

**Trans 135.04 Grant program funding**. (1) GRANT FUND SOURCE. The grant program shall be funded using funds from the annual motor vehicle emission

inspection and maintenance, or I/M, program appropriation established under s. 20.395(5)(hq), Stats.

(2) GRANT FUND AMOUNT. The department of transportation shall establish a one-time, non-recurring grant fund amount sufficient to purchase 300 diesel oxidation catalysts for installation on school buses.

NOTE: The Department established this number through consultation with the Department of Natural Resources. The DNR determined that the lost emission reductions associated with the amendment to s. 110.20(6)(a)1, Stats., exempting two additional model year vehicles from emissions testing could be substantively offset by retrofitting 300 school buses in the program area with oxidation catalysts.

(3) TIMEFRAMES. (a) The total grant fund amount shall be encumbered over the fewest number of fiscal years possible subject to the constraint that, in a given fiscal year, the encumbrance cannot exceed the difference between the annual I/M program appropriation and the amount committed to paying all I/M program expenses for that fiscal year.

(b) Within 30 days of the effective date of this chapter...[revisor insert date], the department shall notify the department of natural resources of the annual I/M program appropriation amount and the amount committed to paying all I/M program expenses for that fiscal year, and initiate the process of encumbering the difference for the grant program. This process shall be repeated at the beginning of each subsequent fiscal year until the full grant fund amount has been encumbered.

(c) Subject to the guidelines established in ss. Trans 135.05 and 135.06, the department of natural resources shall spend available grant funds as expediently as possible.

**Trans 135.05 Vendor selection**. (1) GENERAL. The department of natural resources may contract with one or more vendors to supply diesel oxidation catalysts and to install them.

(2) SELECTION CRITERIA. The department of natural resources shall select vendors based on evaluation of written proposals that specify all of the following:

(a) Unit cost (cost per catalyst).

(b) Overall bid cost.

(c) Documentation of catalyst effectiveness at reducing pollutant emissions, including presentation of diesel bus-specific data.

(d) Ease of catalyst installation and operation.

(e) Catalyst compatibility with buses to be retrofitted.

(f) Whether the vendor manufactures in, or sells through, a Wisconsin-based facility.

(g) EPA retrofit technology verification, reported at www.epa.gov/otaq/retrofit/retroverifiedlist.htm.

(h) Other criteria that the department of natural resources determines are necessary to facilitate selection of the best vendors.

**Trans 135.06 Grant recipient selection**. (1) ELIGIBILITY. Grants may be issued only to school districts or school bus companies that own or lease one or more school buses routinely used to transport students to and from school in the counties identified in s. 110.20(5), Stats. Grants may be issued only to retrofit qualifying buses that were manufactured in any of the 1999 through 2004 model years. Applicants may apply for more than one grant, but only one oxidation catalyst per vehicle is allowed under the grant program.

# NOTE: For example, previously retrofitted buses are not eligible for further retrofit grants.

(2) GRANT REQUEST PROCESS. Grant applicants shall be required to submit a grant request providing all information required by the department of natural resources. Grant requests shall be accepted throughout the year. The department of natural resources shall expeditiously evaluate requests as received. Once completed, the results of the evaluation shall be reported promptly to the applicant.

(3) INFORMATION REQUIREMENTS. The grant request shall include information necessary to determine how well the proposed grant will meet the program's goals. At a minimum, the grant request shall include the following:

(a) The number of oxidation catalysts sought.

(b) The model year of each bus to be retrofitted with an oxidation catalyst.

(c) The vehicle identification number, or other unique identifier, of each bus.

(d) The county in which each bus operates.

(e) Any other vehicle-specific information that the department of natural resources deems to be helpful in evaluating the merits of each grant request.

(4) GRANT REVIEW CRITERIA. The department of natural resources may award grants only for the purpose of equipping school buses that are customarily kept, and serve school districts, in the counties identified in s. 110.20(5), Stats, with oxidation catalysts. At a minimum, grant requests shall be evaluated based on the following criteria:

(a) Timeliness of grant request. This criterion does not apply to requests received within 30 days of the effective date of this chapter...[revisor insert date]. After that date, grant request review and resultant issuance of grants shall be on a first-come, first-serve basis.

(b) Model year of buses to be retrofitted. Preference shall be given first to model year 2004 buses, then model years 2003, 2002, 2001, 2000 and 1999 buses, respectively.

(c) Usage level, with preference given to higher-capacity buses and buses that are used more intensively for transporting students.

(5) GRANT AMOUNTS. Subject to fund availability and the result of the grant request review process, grant applicants may receive a grant for an amount sufficient to cover the purchase of the requested number of diesel oxidation catalysts. The department of natural resources may also, at its discretion and according to criteria established in this section, award a grant for fewer oxidation catalysts than the number requested. Grant amounts may exceed the purchase cost only for the exception established in sub. (6). Grants may not be used to pay for any vehicle operation or maintenance costs, even if the costs are associated with retrofitted oxidation catalysts.

(6) EXCEPTION. Grant applicants unable to install the diesel oxidation catalysts may request, and may receive, a grant sufficient to pay for both purchase and installation of the catalysts. Applicants under this subsection shall provide sufficient explanation of their inability to install the catalysts.

(7) GRANT AWARD CONDITIONS. Upon receiving notification of a grant, each recipient shall be required to:

(a) Sign a statement certifying that, barring unforeseen and unavoidable circumstances, for at least 5 years each retrofitted bus will comply with all of the following:

1. Remain in the applicant's possession.

2. Operate in its current capacity as a school bus.

3. Operate predominantly in one or more of the counties identified in s. 110.20(5), Stats.

(b) Sign a statement certifying that, to the extent possible, the applicant will undertake anti-idling measures for each bus on which an oxidation catalyst is installed.

(c) Agree to schedule all oxidation catalyst installations within 30 days of delivery.

(8) REPORTING REQUIREMENTS. For each bus retrofitted under this grant program, within 90 days of the grant award date anniversary, the grant recipient to the best of its ability shall report the following information to the department of natural resources annually:

(a) Annual hours of operation.

(b) Annual miles traveled.

(c) Estimated annual number of students transported.

(d) Area in which the bus customarily transported students.

(e) The extent to which the recipient has practiced anti-idling measures over the past year.

**Trans 135.07 Grant program termination**. The department shall cease to encumber funds for the grant program as soon as the total grant fund amount has been spent or on June 30, 2008, whichever is earlier.

#### (END OF RULE TEXT)

**Effective Date**. This rule shall take effect on the first day of the month following publication in the Wisconsin Administrative Register as provided in s. 227.22(2)(intro.), Stats.

Signed at Madison, Wisconsin, this \_\_\_\_\_ day of February, 2005.

FRANK J. BUSALACCHI Secretary Wisconsin Department of Transportation