



National School Transportation Association
113 South West Street, 4th Floor Alexandria, VA 22314
800-222-NSTA (6782) Fax: 703-684-3212
www.yellowbuses.org Email: info@yellowbuses.org

NSTA Green School Bus Fleet Certification Overview

Published January 2011 | Certification Survey Due June 30, 2011

NSTA's Clean Diesel Sub-Committee will continue its NSTA Green School Bus Fleet Certification program for NSTA contractor members. The program, first developed in 2010 and amended for 2011, recognizes NSTA members for their efforts in working toward a cleaner environment through the use of available technologies as well as the latest new bus technology.

NSTA contractor members have been working towards positive solutions that will help reduce emissions from school buses in ways that are both good for the environment and cost effective. This has been a major area of emphasis by federal agencies such as the Environmental Protection Agency and its Clean School Bus USA Initiative. The EPA's Clean School Bus USA program has focused on promoting retrofit technologies to reduce harmful emissions from diesel powered school buses. *NSTA's Green School Bus Fleet Certification program is the only school bus industry program to be endorsed by the EPA Clean School Bus USA program.*

Emission reduction and retrofit technologies are highly cost effective in reducing pollution but often do not reduce the cost of operating a vehicle and can even slight increase operating costs. Nonetheless, many school bus contractors have embraced these new technologies as another way to demonstrate a commitment to the community and to differentiate their fleets in a positive way from older, public or competitor fleets.

School buses have always been the safest way to transport children and NSTA members are doing their part to make it the greenest mode of transportation too. The **NSTA Green School Bus Fleet Certification** program will promote your company's efforts to provide environmentally responsible school bus operations.

How to Obtain Your Company's Green School Bus Fleet Certification

You will need to fill out a **site specific** 16 question survey and submit the survey to the NSTA Central Office by 5 PM ET on **June 30, 2011**. Members whose fleets are newly certified will be recognized at NSTA's Annual Meeting and Convention held July 16 – 20, 2011 in Baltimore, MD.

Included with this material you will find the survey, an explanation of the questions' meaning and a reference list of current EPA/CARB verified Level 1, 2, and 3 diesel exhaust emission reduction technologies. You can use these additional materials to help you determine how to answer the survey questions.

The score from the survey will determine whether your fleet qualifies for Green School Bus Fleet Certification at the Bronze, Silver, or Gold level. If your company has multiple sites, you need to fill out a survey for each site you wish to certify. Alternately, you can fill out one survey to certify your entire company's fleet.

Certification levels are scored as follows:

Bronze Level: 40 – 59 points

Silver Level: 60-79 points

Gold Level: 80 points and up

You can fill out the survey online at www.surveymonkey.com/s/nsta-green-fleet or print the survey and fax (703-684-3212) or email (info@yellowbuses.org) it the NSTA Central Office.

NSTA's Green School Bus Fleet Certification is good for one (1) year and may be recertified in future years.

How to Re-certify Your Company's Previously Certified Fleet

Recertification for NSTA contractor members that received either Bronze, Silver, or Gold certification in 2010 will need to submit a letter on company letter stating that the fleet at the previously certified site has not been modified in such a way that it would change the certification criteria point total originally submitted. Upon receipt of this letter, NSTA will send you the appropriate materials to display your recertification status. The letter must be submitted by 5 PM ET on June 30, 2011.

If a previously certified site or company wishes to advance from Bronze to Silver or Silver to Gold, then a new survey must be filled out and submitted by the deadline.

NSTA's Go Yellow, Go Green committee will distribute updated certification criteria for future years, including advancing from a lower to higher level, will be distributed at the 2011 NSTA Annual Meeting and Convention.



National School Transportation Association
113 South West Street, 4th Floor Alexandria, VA 22314
800-222-NSTA (6782) Fax: 703-684-3212
www.yellowbuses.org Email: info@yellowbuses.org

NSTA Green School Bus Fleet Certification Survey

Certification Survey Due June 30, 2011 to the NSTA Central Office
Complete the survey online at www.surveymonkey.com/s/nsta-green-fleet

Company Name: _____
Location/Site Address: _____
Submitted by: _____
Phone: _____ Email: _____

The following questions require that you simply circle off the appropriate answer. Please refer to the included question guideline for a brief explanation of each question. If you have any other questions regarding the survey, please contact the NSTA Central Office at 800-222-6782 or via info@yellowbuses.org.

		Circle One	
1	Is an idle reduction policy in place at this location, along with at least one comprehensive idle-reduction in-service meeting held for its drivers each school year?	Yes	No
2	Is idle-reduction technology used on any buses at this site?	Yes	No
3	Does your driver training program train drivers on how to conserve fuel?	Yes	No
4	Does this site work with its customer to reduce fuel consumption through more efficient routing, fleet management technology, GPS, or consolidation of bus stops?	Yes	No
5	If asked, could this site demonstrate how it has worked with its customers to advertise support of EPA's Clean School Bus USA mission and its benefits?	Yes	No
6	Circle the percentage of buses at this site that are 2010 EPA diesel emission compliant.	25%	50% or more
7	Circle the percentage of buses at this site that are 2007 EPA diesel emission compliant.	20% 30% 40% 50% or more	
8	Circle the percentage of buses at this site that are model year 2004 or newer.	30% 50% 70% or more	
9	Circle the percentage of buses at this site retrofitted with EPA/CARB verified level three technology.	30% 50% 70% or more	
10	Circle the percentage of buses at this site retrofitted with EPA/CARB verified level two technology.	30% 50% 70% or more	
11	Circle the percentage of buses at this site retrofitted with DOC, Crankcase Filter or EPA/CARB level one technology	30% 50% 70% or more	
12	Does this site operate any diesel/hybrid powered vehicles?	Yes	No
13	Is the average age of the fleet at this site 6.5 years or less?	Yes	No
14	Is bio-diesel used in any buses at this site?	Yes	No
15	Is methane or propane used to power any buses at this site?	Yes	No



National School Transportation Association
 113 South West Street, 4th Floor Alexandria, VA 22314
 800-222-NSTA (6782) Fax: 703-684-3212
 www.yellowbuses.org Email: info@yellowbuses.org

NSTA Green School Bus Fleet Certification Survey Reference Document

Published January 2011 | Certification Survey Due June 30, 2011

The following are brief explanations on how to answer each of the questions on the survey and the point level to determine the certification level. If you have further questions, please contact the NSTA Central Office at 800-222-6782 or via email at info@yellowbuses.org.

Each survey number corresponds to the numbered explanation below:

Survey Question	Points Value
1 The site must have in place a company policy statement which clearly mandates compliance to idle-reduction procedures and have an annual in-service training session that incorporates in it a component for training driver on the practice of idle-reduction.	5
2 To answer yes, the technology for idle reduction commonly recognized as acceptable for school buses include engine block heaters, fuel operated heaters, APU's, real time electric monitoring(GPS,AVL), or event recording. Are any of these technologies applied to any number of buses at this site?	10
3 To answer yes, the site must offer as part of its driver training program a fuel conservation component either in the classroom training session or behind the wheel.	5
4 To answer yes, the site or its customer should have in place route optimization software, a fleet management system, or other means of efficient route analysis techniques reviewed at least once per school year.	5
5 If you answer yes, you may be required to explain how you use the EPA's Clean School Bus USA program to promote goodwill in your community, such as using their coloring books or the 'Magic Bus' materials.	10
6 The circled percentage of buses at this site must be powered by engines manufactured to meet 2010 EPA compliant diesel exhaust emissions	25% = 25 pts. 50% = 50 pts. 20% = 10 pts.
7 The circled percentage of buses at this site must be powered by engines manufactured to meet the EPA 2007 exhaust emissions standard.	30% = 20 pts. 40% = 30 pts. 50%+ = 40 pts.
8 The circled percentage of buses at this site must be model year 2004 EPA diesel exhaust emissions compliant, the year diesel oxidation catalyst (DOCs) became OEM installed.	30% = 5 pts. 50% = 20 pts. 70%+ = 30 pts.
9 The circled percentage of buses at this site must have been <u>retrofitted</u> with EPA verified emission reduction level three devices which reduce particulate matter by 85%. (See reference sheet for qualifying emission reduction technologies.)	30% = 5 pts. 50% = 20 pts. 70%+ = 30 pts.
10 The checked percentage of buses at this site must have been retrofitted with EPA/CARB verified level two devices which reduce particulate matter by at least 50%. (See reference sheet for qualifying level two technologies.)	30% = 10 pts. 50% = 15 pts. 70% = 20 pts.
11 The checked percentage of buses at this site must have been retrofitted with EPA/CARB verified level one technology that reduces particulate matter by at least 25%, that is either a diesel oxidation catalyst or a crankcase ventilation filter. (See reference sheet for qualifying level one emission reduction technologies.)	30% = 5 pts. 50% = 15 pts. 70% = 20 pts.

Note: If both DOC and CVF are used, add 5 points to each value.

- | | | |
|----|---|---------|
| 12 | Circle yes if this site operates <u>any</u> diesel/hybrid powered vehicles. | 10 pts. |
| 13 | Circle yes if the total years of the fleet divided by the number of buses is 6.5 or less. (Example one 2005 bus = 6 years divided by one = 6) | 10 pts. |
| 14 | Circle yes if you use any blend of bio-diesel in 100% of the buses at this site. | 10 pts. |
| 15 | Circle yes if natural gas or propane is used in any buses operated from this site. | 5 pts. |



National School Transportation Association
 113 South West Street, 4th Floor Alexandria, VA 22314
 800-222-NSTA (6782) Fax: 703-684-3212
 www.yellowbuses.org Email: info@yellowbuses.org

NSTA Green School Bus Fleet Certification Verified Technologies List

Published January 2011 | Certification Survey Due June 30, 2011

The following information is provided as a summary of verified diesel emission control strategies. Additional requirements specific to engine compatibility are provided in the Executive Order. The factors outlined in the Executive Order are legal requirements of each verification; therefore, these conditions must be met before determining if a particular device is applicable to the end-users type of engine. The Air Resources Board recommends that you contact the manufacturer, or their authorized distributor, prior to making any purchasing decision. Please click on the manufacturer link for additional information.

Plus (+) designates these systems as compliant with 2009 NO2 requirements.

PM Level	Product Name	Plus	Technology Type	PM Reduction	NOx Reduction	Applicability
LEVEL THREE TECHNOLOGIES (3)	Catalytic Exhaust Products Ltd. Dieselytic SXS-SC DPF	+	DPF	85%	N/A	Stationary prime and emergency standby generators and pumps with Tier 1, Tier 2, or Tier 3 certified off-road engines meeting 0.2 g/bhp-hr or less diesel PM
3	Caterpillar DPF	+	DPF	85%	N/A	Specific 1996-2005 model years; off-road; CARB diesel; biodiesel.*
3	Cleaire Allmetal	+	DPF	85%	N/A	1996- 2010 model year diesel engines in both tracked and rubber-tired off-road vehicles; CARB diesel; biodiesel.*

3	Cleaire Horizon	+	DPF	85%	N/A	Most on-road diesel engines through 2006 model year; Certain MY 2006 and 1993 or older engines with OEM diesel oxidation catalysts; CARB diesel; biodiesel.*
3	Cleaire Lonestar	+	Lean NOx Catalyst and DPF	85%	40%	Conditionally verified for 1996 through 2009 model year; rubber-tired off-road vehicles; CARB diesel; biodiesel.*
3	Cleaire Longmile	+	DOC/DPF	85%	N/A	1993-2006 on-road; CARB diesel; biodiesel.*
3	Cleaire Longview (reformulated)	+	Lean NOx Catalyst and DPF	85%	25%	1993-2006 model year on-road; CARB diesel; biodiesel.*
3	Cleaire Phoenix	+	DPF	85%	N/A	Conditionally verified for 1996-2010 model year rubber-tired off-road vehicles. CARB diesel; biodiesel.*
3	Cleaire Vista	+	DPF	85%	N/A	1993-2006 model year on-road; CARB diesel; biodiesel.*
3	CleanAIR Systems PERMIT	+	DPF	85%	N/A	Stationary emergency and prime generators; CARB diesel; biodiesel.*
3	Dinex DiSiC	+	DPF	85%	N/A	Most trailer TRUs using 1999-2005 model year engines; CARB diesel.
3	Donaldson LNF	+	DPF	85%	N/A	1993-2006 model year on-road; CARB diesel; biodiesel.*
3	Donaldson LXF	+	DPF	85%	N/A	2002-2006 model year on-road; CARB diesel; biodiesel.*
3	Donaldson SEF	+	DPF	85%	N/A	1991-2006 model year on-road; CARB diesel; biodiesel.*

3	DCL International Inc.	+	DPF	85%	N/A	1996-2009 model year, off-road; CARB diesel; biodiesel.*
3	DCL International Inc.	+	DPF	85%	N/A	Stationary prime and emergency standby generators, pumps, and compressors; Tier 1, 2, or 3 off-road engines certified to < 0.15 g/bhp-hr PM; CARB diesel; biodiesel.*
3	Engine Control System Purifilter (Low Load)	+	DPF	85%	N/A	1994-2004 on-road; CARB diesel; biodiesel.*
3	Engine Control System Purifilter (High Load)	+	DPF	85%	N/A	Conditional verification for off-road for specific engines; model years 1996-2008; CARB diesel; biodiesel.*
3	Engine Control System Purifilter (High Load)	+	DPF	85%	N/A	1993-2006 CA certified engines; Specific 1994-2006 Federally certified engines; on-road; CARB diesel; biodiesel.*
3	Engine Control System Combifilter	+	DPF	85%	N/A	2007 or older off-road; CARB diesel; biodiesel.*
3	Engine Control Systems Purifilter Plus	+	DPF	85%	N/A	1993 and 2006 on-road; CARB diesel; biodiesel.*
3	ESW Canada ThermaCat	+	DPF	85%	N/A	1996-2009; off-road; 1993-2006 on-road; CARB diesel; biodiesel.*
3	GTE Industries. Purity DPF	+	DPF	85%	N/A	Stationary prime and emergency standby generators and pumps with Tier 1, Tier 2, or Tier 3 certified off-road engines meeting 0.2 g/bhp-hr or less diesel PM

3	HUSS Umwelttechnik FS-MK	+	DPF	85%	N/A	Most on-road diesel engines through 2006 MY and most off-road through 2009 MY; CARB diesel; biodiesel. * Conditionally verified for 1998 and newer TRU's.
3	Johnson Matthey ACCRT	+	DPF	85%	N/A	Specific 2002-2006; on-road; CARB diesel; biodiesel.*
3	Johnson Matthey CRT reformulated	+	DPF	85%	N/A	1994 - 2006; on-road; CARB diesel
3	Johnson Matthey CRT	+	DPF	85%	N/A	Stationary emergency/standby generators; conditionally verified for stationary prime generators. CARB diesel; biodiesel.*
3	Johnson Matthey EGRT	+	EGR/DPF	85%	40%	2000 International DT-466, 2000 Cummins ISM 2001 Cummins ISB, 1998-2002 Cummins ISC, 2001 Cummins ISL, 2001 MY DDC - 50, and 2001 DDC - 60. on-road; CARB diesel.
3	MIRATECH Corporation combiKat	+	DPF	85%	N/A	Stationary emergency and prime generators with a PM emission rate of 0.2 g/bhp-hr or less.
3	Nett Technologies. NETT GreenTRAP™ DPF	+	DPF	85%	N/A	Stationary prime and emergency standby generators and pumps with Tier 1, Tier 2, or Tier 3 certified off-road engines meeting 0.2 g/bhp-hr or less diesel PM
3	Rypos, Inc. HDPF/C™	+	Hybrid DPF	85%	N/A	1996-2007 stationary emergency standby generators and pumps with a PM emission rate of 0.2 g/bhp-hr or less and certified to Tier 1, Tier 2, or Tier 3 off-road diesel engine standards; CARB diesel; biodiesel.*
3	SK Energy Co. Econix DPF -A	+	DPF	85%	N/A	1994-2006; on-road; CARB diesel.

3	Süd-Chemie Inc EnviCat-DPF™	+	DPF	85%	N/A	Stationary prime and emergency standby generators and pumps; CARB diesel; biodiesel.*
3	Teleflex Clear Sky DPF	+	DPF	85%	N/A	With the Comfort Pro APU, powered by select Kubota Z482 diesel engines with model years between 2005 and 2009.
3	Thermo King eDPF	+	DPF	85%	N/A	2006-2008 Thermo King auxiliary power units; CARB diesel.
3	Universal Emissions Technologies GreenShield® DPF	+	DPF	85%	N/A	Stationary prime and emergency standby power generators and pumps with Tier 1, Tier 2, or Tier 3 certified off-road engines.
LEVEL 2	Engine Control System AZ Purimuffler/Purifier	+	DOC + Alt Fuel	50%	20%	1996-2002 off-road; PuriNOx
2	Lubrizol PuriNOx	+	Emulsified Fuel	50%	15%	1988-2003 on-road.
2	Proventia FTF™	+	FTF	50%	N/A	Most Thermo King trailer TRUs using 1985 through 2002 model year engines; CARB diesel; biodiesel.*
2	Proventia Bobtail FTF™	+	FTF	50%	N/A	Select Thermo King truck TRUs using 1987 to 2002 model year engines. CARB diesel; biodiesel*
2	Rypos ADPF	+	DPF	50%	N/A	1996-2008 stationary engines (certified to Tier 1, 2, or 3 off-road PM emission level); CARB diesel; biodiesel*; no EGR, DOC or pre-existing DPF.

2	Rypos, Inc. DPF/LETRU™	+	DPF	50%	N/A	Applicability: Most trailer TRUs using 2003 and older model year engines; ULSD CARB diesel (less than 15 ppm sulfur).
2	Thermo King PDPF™	+	FTF	50%	N/A	1985-2002 transport refrigeration unit engines; CARB diesel.
2	Rypos, Inc. ADPF	+	DPF	50%	N/A	Marine Harbor Craft
LEVEL 1	Donaldson DCM 6000	+	DOC	25%	N/A	1988-1990 on-road; CARB diesel; biodiesel.*
1	Donaldson 6000 + Spiracle	+	DOC + crankcase filter	25%	N/A	1988-2002 on-road; CARB diesel; biodiesel.*
1	Donaldson DCM 6100 + Spiracle	+	DOC + crankcase filter	25%	N/A	1991-2002; CARB diesel; biodiesel.*
1	Donaldson DCM 6100	+	DOC	25%	N/A	1994-2002; CARB diesel; biodiesel.*
1	Donaldson 6000 + Spiracle (off-road)	+	DOC + crankcase filter	25%	N/A	Off-road port equipment; CARB diesel; biodiesel.*
1	Engine Control System AZ Purifier & Purifmuffler	+	DOC	25%	N/A	1991-2003 Cummins and Navistar on-road; 1973-1993 DDC 2 stroke; 1991-2002 HHD certain model Cummins and DDC; CARB diesel; biodiesel.*
1	Engine Control System AZ Purifier & Purifmuffler	+	DOC	25%	N/A	1996-2002 off-road; CARB diesel; biodiesel.*
1	Extengine ADEC	+	DOC + SCR	25%	80%	1991-1995 Cummins 5.9 liter off-road; CARB diesel.

1	Vycon REGEN System	+	Energy Storage System	25%	30%	Pre-1996 model year or Tier 1, 2, or 3 certified off-road diesel engines on rubber-tired gantry cranes; biodiesel. *
---	------------------------------------	---	-----------------------	-----	-----	--