2008

GUIDELINES

Date of Board Approval: March 27, 2008
Date Issued: April 15, 2008

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Since 2001, the Air Resources Board's (ARB or Board) Lower-Emission School Bus Program has been a mainstay of the Board's incentive programs to protect vulnerable populations, particularly California's school children, from the harmful effects of air pollution. With its first funding appropriation of $50 million, the Board set forth a program to reduce school children's exposure to smog-forming and cancer-causing pollution by providing grants to upgrade our State's aging school bus fleet. Over the past seven years, State funds totaling just over $100 million have replaced 600 of the oldest, most polluting public school buses, and equipped about 3,800 other diesel buses with ARB-verified pollution control equipment that significantly reduces toxic particulate matter emissions.

A further measure of the program's success lies in our partnerships formed with local air districts and school districts, and the working relationships developed with school bus distributors. At the program's inception, staff estimated about 6,600 pre-1987 model year buses remained operating in California's public schools. Of those, nearly 1,900 predated minimum federal motor vehicle safety standards effective in early 1977. Today, staff estimates less than 2,800 pre-1987 model year buses remain in use and fewer than 100 are of the oldest vintages – the pre-1977 model years. Such significant progress is only achieved through the cooperative and dedicated funding efforts at both the State and local levels, and through combined outreach support.

This progress also serves to highlight that our work is not yet finished and demonstrates the need for continued funding to build on the program's past successes. Additional program funding is now available through Proposition 1B, the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006. Approved by California voters in November 2006, this bond act designates $200 million to replace old, high-polluting public school buses and to retrofit middle-aged diesel buses--those that still have a substantial service life--with ARB-verified pollution control equipment.

Enabling legislation, Senate Bill 88 (Stats 2007 Ch 181), prescribes the funding criteria and other requirements for the expenditure of the Proposition IB funds, while Governor Schwarzenegger's Executive Order S-02-07 (EO S-02-07) contains further directives to ensure robust fund accountability and program oversight. Incorporating these requirements, this report presents the staff's funding allocations from Proposition 1B and revisions to the existing Lower-Emission School Bus Program Guidelines (Guidelines) for the use of these funds. These Guidelines provide the protocols for use by the ARB staff and local air districts in implementing the program. With the Proposition 1B funds, we estimate the program will replace over 1,100 high-polluting buses, including the last of the pre-1977 buses, with new, clean models, and retrofit up to 3,500 existing diesel buses with ARB-verified pollution control equipment. Some of these low-emitting new buses may be on the road by the end of the year, while every one of the new and retrofitted buses will be in service transporting California's school children no later than June 30, 2011.

Significant program changes for this funding cycle include:

- Air district funding allocations as prescribed by Senate Bill 88. This legislation directs the ARB to allocate funds to account for air districts' populations of pre-1977 model year buses and their percentage shares of the statewide 1977-1986 model year bus population.
- Air district discretion to determine how to apportion funds between new bus purchases and retrofits. While Senate Bill 88 provides air districts with funding flexibility (after dedicating sufficient funds to replace all pre-1977 buses), these Guidelines require air districts to propose and commit to a retrofit funding target. The ARB recommends a goal of designating 25% of program funds for the retrofit of in-use diesel school buses.
- A choice of either direct local air district implementation, regional implementation by a neighboring air district, or State level implementation. Proposition 1B funds spent within each air district will be the same regardless of the implementation option chosen by the air district.
- Increased program oversight and accountability, including expansive performance milestones and more comprehensive reporting and documentation retention requirements, designed to improve program efficiency and maximize the use of State grant funds, as directed by Executive Order S-02-07 and Senate Bill 88.
- Utilization of a new Lower-Emission School Bus Program database to provide transparency and accountability to the public on the use of the Proposition 1B funds. We expect this user-friendly database to be operational in spring 2008.
- Modified requirements for both the new bus purchase and retrofit program components that incorporate the latest technology developments.

These changes are necessary to effectively and efficiently manage the large infusion of program funding available from Proposition 1B. Through the revised program structure, the ARB will strengthen existing partnerships with local air districts and school districts, and forge new ones, to provide California's school children with safe, low-polluting school transportation.

I. PROGRAM OVERVIEW

The Lower-Emission School Bus Program is a grant program that provides funds to purchase new buses to replace old, high-emitting public school buses, and to equip in-use diesel school buses with retrofit devices that significantly reduce toxic particulate matter (PM) emissions. It is administered by the ARB and implemented by local air quality management and air pollution control districts (air districts). The primary goal of the Lower-Emission School Bus Program is to reduce school children's exposure to both cancer-causing and smog-forming pollution. The program does not impose any regulatory requirements on school districts and their participation in the program is voluntary.

This document describes revisions to the Lower-Emission School Bus Program Guidelines (Guidelines) to comply with requirements of Proposition 1B, the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, and its enabling legislation, Senate Bill 88 (SB 88; Stats 2007 Ch 181) and the accountability requirements of Governor Schwarzenegger's EO S-02-07, as well as to make necessary administrative and technical updates.

A. Background

Since 2000, the Lower-Emission School Bus Program has provided over $100 million in State funding for new alternative fuel and diesel school buses for California's public school districts, and retrofit devices for existing in-use diesel buses.

In its first seven years, the Lower-Emission School Bus Program replaced about 600 pre-1987 model year public school buses with new, lower-emitting models and equipped about 3,800 in-use buses with ARB-verified diesel retrofit devices. Historically, the program has funded about of 75 percent to 95 percent of the cost of the new bus. The exception was during the 2005-2006 fiscal year funding cycle when program funds were used to pay the full purchase cost for pre-1977 model year bus replacements. These Guidelines will continue the policy to provide full funding for pre-1977 model year replacements, but will require match funding for 1977-1986 model year bus replacements.

B. Need for the Program

The Lower-Emission School Bus Program has made significant strides in reducing school children's exposure to diesel-related pollution through a combination of State and local funding. The primary focus has been on replacing buses manufactured prior to 1977. These buses do not meet federal motor vehicle safety standards and were not subject to oxides of nitrogen (NO_x) and PM emission control. ARB staff estimates that fewer than 100 pre-1977 school buses remain in service in California's public schools. It is a priority to replace these old buses because they lack minimum federal motor vehicle safety equipment and are high-polluting. An average 2007 model year bus emits about 95 percent less toxic PM and over 85 percent less NO_x than a pre-1977 model year bus.

The Lower-Emission School Bus Program has sought to reduce emissions from the remaining public school bus fleet by replacing 1977-1986 model year school buses (which had minimal NOx control and no PM controls), and by retrofitting middle-aged diesel school buses that are not eligible for replacement with program funds. Funding from Proposition 1B can replace approximately 1,000 of the 1977-1986 buses and retrofit up to 3,500 in-use diesel buses.

The Lower-Emission School Bus Program provides a needed source of funds to accelerate the replacement and retrofit of California school buses, thus reducing school children's exposure to toxic PM emissions. Even after expending the Proposition 1B funds however, ARB staff estimates about 1,700 1977-1986 model year public school buses will remain in service, as well as over 15,000 1987 model year and newer diesel buses that are eligible for retrofits.

C. Program Funding

In November 2006, California voters approved Proposition 1B, the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006. Proposition 1B provides $200 million for school bus retrofit and replacement to reduce air pollution and to reduce children's exposure to diesel exhaust. From these funds, about $7 million were set aside for bond financing costs. The State Legislature appropriated $193 million in the 2007-2008 fiscal year budget to the ARB for the Lower-Emission School Bus Program. SB 88 allows up to five percent of the funds to be used for program administration; however, the ARB will use less than one percent for program administration. This leaves approximately $191 million available for expenditure in local air districts, including allowable administrative expenses (see Table I-1 of this chapter).

D. Bond Accountability

EO S-02-07 requires significant and robust accounting procedures for Proposition 1B bond funds following a three-part accountability structure that addresses Front-End, In-Progress, and Follow-Up Accountability. The ARB's plan, as approved by the Department of Finance (DoF), includes Front-End Accountability, following the open public process in developing and proposing these Guidelines. The Guidelines set the requirements by which each local air district shall implement its local school bus program, as well as the criteria for selecting and paying for eligible school bus projects. ARB's In-Progress Accountability, for ease of tracking and transparency, will require air districts to report semi-annually using the ARB's web-based Bond Accountability Database. Finally, ARB's Follow-Up Accountability will be accomplished by conducting audits of district programs, including grant recipients. Follow-up audits will be used as an enforcement mechanism to ensure Proposition 1B funds are spent appropriately and emission reductions are achieved as intended through this program.

E. Emission Reductions

After expenditure of all the Proposition 1B funds to replace old, high-emitting buses and to retrofit in-use diesel buses, ARB staff estimates that the program will provide

emission reductions of approximately 3,000 tons of NO_x, 200 tons of PM, and 22,000 tons of CO_2 through 2020.

F. Impact of Upcoming Regulations

The Board is scheduled to consider the Proposed Regulation to Reduce Emissions from Diesel Particulate Matter, and Other Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles (In-Use On-Road Heavy-Duty Diesel Vehicles Regulation) in the fall of 2008. This proposed regulation would require that school buses be retrofitted with ARB-verified diesel emission control strategies (retrofits) that reduce the emissions of diesel PM. ARB strongly encourages air districts to implement local robust school bus retrofit programs to assist school districts prior to implementation of the proposed regulation.

G. Summary of Guideline Revisions

The new guidelines are the result of a significant allocation of funding from Proposition 1B. Since this funding is from bond proceeds, it is subject to EO S-02-07, which requires significant and robust accountability procedures to be in place to ensure that State funds are spent properly and that California's citizens can measure the progress of school bus replacements and retrofits in their local areas.

1. Implementing Agency

The ARB is responsible for overall administration of the Lower-Emission School Bus Program. Historically, the ARB has worked closely with the California Energy Commission (CEC) and local air districts to implement the program statewide in previous years. Due to resource priority issues within the CEC, the ARB has developed several implementation options for districts, including those in which CEC previously implemented the program, to have the opportunity to self-implement the program via grants from the ARB. However, air districts will also have the option of allowing a larger air district, or the ARB to implement the program on their behalf. The ARB is working with the California Air Pollution Control Officers Association (CAPCOA) to assist those districts that request the ARB to implement the program in their area. Funding will be the same within an air district regardless of the implementation option it selects.

2. Funding Allocations

Funding will be allocated following the criteria set forth in SB 88. SB 88 directs the ARB to allocate Proposition 1B funds by first setting aside funds to replace the remaining 1976 and older model year school buses in California. Remaining funds are to be allocated to air districts based on each district's share of the 1977 through 1986 model year school bus population. After ensuring funding for replacing all pre-1977 model year buses, SB 88 provides flexibility by allowing air districts the discretion to determine how to split their remaining allocation between replacing and retrofitting buses. A complete list of pre-1977 model public school buses that are eligible for replacement is provided in Appendix F. Table I-1 includes bus populations and allocations broken down by seven of the larger air districts and the remaining group of 28 air districts. Appendix B provides a complete breakdown of each air district's funding allocation.

Table I-1 Lower-Emission School Bus Program Funding Allocations			
	Pre-1977 MY Bus Population	1977 – 1986 MY Bus Population	Total Allocation (including admin)
Larger Air Districts			
Bay Area	4	118	$8,400,000
Monterey	8	90	$7,100,000
Sacramento	1	134	$9,100,000
San Diego	2	80	$5,600,000
San Joaquin Valley	10	567	$39,150,000
South Coast	9	1,034	$70,100,000
Ventura	4	66	$5,000,000
Subtotal	38	2,089	$144,450,000
Remaining 28 Air Districts			
Subtotal	36	630	$46,930,000
TOTAL STATEWIDE	74	2,719	$191,380,000

3. Eligible Applicants and Project Types

Eligible applicants for school bus replacements include public school districts and Joint Powers Authorities (JPA). For school bus retrofit projects, applicant eligibility has been extended to include private transportation contractors that provide transportation for public schools.

Eligible project types will continue to include replacements of pre-1987 school buses and retrofits for the middle-aged in-use diesel school bus fleet (1987 model year and newer buses). Funding caps have been established for both replacement and retrofit projects. For school bus replacements, not more than $140,000 will be provided by State Program funds, with additional funding not to exceed 10 percent of the new bus purchase grant award for alternative fuel infrastructure, if required. Diesel-fueled school bus replacement costs should be significantly less than the cost cap. Depending on the technology chosen for the replacement bus, the cost cap may not cover the entire cost for an alternative-fueled or electric-hybrid school bus. For school bus retrofits, the funding cap is $20,000 per retrofit; this cap includes allowable funding for lifetime cleaning costs of the device and the purchase of back-up filters, to allow retrofitted school buses to stay in operation when the buses primary filter is undergoing routine cleaning and maintenance. Because State funds are limited, funding caps are necessary to maximize funding to pay for a greater number of projects statewide.

4. Applying for Funds

School districts will be contacted by their local air districts or ARB/CAPCOA about funding opportunities. However, it would be in the best interest of the school district to ensure their contact information is up-to-date and understand the timelines of their local

implementing agency[1]. In general, those school districts with pre-1977 model year buses identified in Appendix F will be contacted shortly after Board approval of the guidelines. School districts that wish to replace pre-1987 model year buses or wish to retrofit buses should look for proposal requests from their implementing agency later this year.

Applications must be obtained from, and submitted to, the implementing agency. Successful applicants must enter into a contract with the implementing agency and adhere to all contract requirements, which include meeting project milestones and incorporating minimum contract requirements, as set forth by the implementing agency, in purchase order agreements with vendors. Successful applicants must also ensure that school buses and retrofit devices are operated and maintained according to the manufacturer's warranty specifications and to the applicable ARB retrofit device verification Executive Orders. Chapters III and IV provide specific project requirements for both school bus replacements and retrofits.

Successful applicants will be subject to audit by the DoF, ARB, or the local air district. Hence, successful applicants must retain the records and documents listed in Appendix E.

5. School Bus Replacements

All school buses eligible for replacement must be replaced with 2007 model year or newer buses equipped with engines certified to 1.4 grams per brake horsepower-hour (g/bhp-hr) NO_x or cleaner and 0.01 g/bhp-hr PM. Because pre-1977 model year public school buses predate federal safety standards, they are a priority to replace. Consistent with previous guidelines, public school districts will not be required to provide match funds when replacing these buses. Applicants must enter into contracts with the implementing agency and have new buses ordered for pre-1977 model year replacements by February 1, 2009.

To maximize the use of State funds, school districts will be required to provide $25,000 in match funding when replacing eligible 1977-1986 model year school buses. However, air districts may use their local funds (e.g., AB 923 funds, AB 2766 funds) to assist school districts with the match funding requirement. While Proposition 1B funds provide the opportunity for a large-scale State program, these funds alone are not sufficient to upgrade every bus eligible for replacement. At the local level, air districts have a greater ability to analyze the specific needs of the school districts in their regions and to determine how to best assist eligible school districts with the match funding requirements. Every air district that generates funds through AB 923 (the $2.00 portion of motor vehicle registration surcharge fees) can reasonably provide the match funding for buses eligible for replacement in their respective regions. Historically, the new bus purchase funds have been oversubscribed throughout the State, and we expect this to continue as we move forward in the program.

[1] School districts can identify who their implementing agency is after June 30, 2008, by checking the ARB website: http://www.arb.ca.gov/bonds/schoolbus/schoolbus.htm

All school buses replaced under the program must be dismantled within 60 days of receipt of the new, replacement bus. For new buses, proof of new vehicle delivery and dismantling of the replaced vehicle must be provided before payment is made by the implementing agency.

6. Retrofits

Retrofits continue to be a vital component in the ARB's regulatory and incentive programs. Because retrofits are the most cost effective method of reducing emissions from school buses, providing the greatest health benefit per dollar spent by reducing toxic PM emissions, the Board designated 25 percent of the total program funds to school bus retrofits in previous funding cycles. However, SB 88 precludes the ARB from designating a specific retrofit allocation and instead provides air districts the discretion to apportion funds between new bus purchases and retrofits. As such, these Guideline revisions require air districts to propose and commit to a retrofit funding target; the ARB recommends that air districts dedicate 25 percent of their allowable allocations to school bus retrofits. For air districts where ARB implements the local program, ARB will set a goal of 25 percent of the funds to pay for retrofits. Public school districts and private transportation providers that contract with public school districts are eligible to receive program funds to retrofit their 1987 and newer model year buses with ARB-verified Level 3 devices.

7. Air District Program Administration

To address the requirements of EO S-02-07, greater specificity has been added to the new administrative requirements that are included in these Guidelines. These are detailed in Chapter V, Program Administration. In summary, these new requirements include:

- Air districts must submit policies and procedures for local implementation of the Lower-Emission School Bus Program.
- Specific contractual terms between air districts and successful applicants.
- Provisions for ARB program oversight and audit responsibility.
- Program accountability: Air districts must report to the ARB semiannually.

In recognition of the fact that increased accountability will require additional air district resources, air districts may use up to two percent of their total allocations of State program funds for implementation and outreach costs. Additionally, an air district may use up to five percent of the funding that it designates to retrofits (in addition to the aforementioned two percent of its total allocation) for implementation and outreach costs for the retrofit component of its program.

Air districts must account for administrative and project funds separately. Expenditures of Lower-Emission School Bus Program State program funding, including funds used to cover administrative costs, are subject to audit.

8. Timetable

ARB will mail grant agreements to individual air districts in late spring 2008. Hence, Proposition 1B funds would be available at that time. Districts will have until June 30, 2008, to sign the grant agreements and accept funds. Air districts will receive their initial funding disbursements for the replacement of pre-1977 model year public school buses upon ARB's approval of the local air districts' Policies and Procedures for program implementation. To receive subsequent fund disbursements, air districts must meet specific milestones to ensure program and fund accountability. These milestones are discussed in detail in Chapter V, Section G. The ARB has designed a timeline that allows an air district to receive up to 65 percent of its total allocation through June 30, 2009. The ARB anticipates some school bus projects will begin as early as fall 2008; however, all State program funding must be paid out by June 30, 2011.

II. ISSUES

This chapter addresses several significant issues affecting the development of the revised Lower-Emission School Bus Program Guidelines. Specifically, it contains brief overviews on oldest bus replacement, alternative fuel engine availability, funding for CNG fuel tank replacement, and matching fund requirements for 1977 – 1986 model year bus replacements.

A. Oldest Bus Replacements

Senate Bill 88 requires air districts to use their funds dedicated to new school bus purchases (after replacing eligible pre-1977 model year buses) to "replace the oldest school buses of model years 1977 to 1986, inclusive, within the district." In previous years when the program was not bound by Legislative requirements for 1977-1986 bus replacements, the Guidelines provided school districts and air districts the flexibility to choose which buses to replace within this model year group. Because these buses have the same basic emission characteristics, there is no significant emission benefit associated with retiring an older bus versus a newer bus in this model year range.

School transportation fleet managers have advised ARB (and continue to do so) that they prefer the discretion to determine which of these buses to retire in order to keep their best performing buses in service. They report that, in some cases, their older buses in the 1977-1986 model year range have been repowered with newer engines or rebuilt and restored; these are the buses they would like to keep on the road in the absence of sufficient funds to replace all the 1977-1986 model year buses. Nonetheless, SB 88 prescribes the directive that the oldest buses shall be replaced. To implement this directive in a practical manner for a large-scale State program, the ARB staff is proposing that air districts shall award funds to replace the eligible oldest buses within their respective regions based on the applications received from school districts and that meet the requirements of these Guidelines. Additional information regarding this replacement mechanism is contained in Chapter III.

B. Alternative Fuel Engine Availability

The purchase of alternative fuel school buses, primarily CNG buses, has been an integral strategy in advancing the program's goal to reduce school children's exposure to cancer-causing and smog-forming pollution. School buses powered by CNG engines are inherently low in NO_x and PM. However, as heavy-duty diesel engines have achieved significantly lower emission levels once only attained by alternative fuel engines, the number of available alternative fuel engines certified each year has decreased.

John Deere, the leading manufacturer of CNG school bus engines discontinued new production of their CNG engines in 2007. John Deere's departure from the CNG engine market leaves a significant void in the alternative fuel school bus sector and creates uncertainty regarding the availability of future CNG engines for use in school buses. Under these Guidelines, an alternative fuel (propane) engine is eligible for program

funding (as identified in Table G-1). An additional alternative fuel engine (CNG) suitable for school bus applications is anticipated to be available later this year

C. Alternative Fuel/Diesel Funding Split for New Buses

With the adoption of the first Lower-Emission School Bus Program Guidelines in December 2000, the Board designated two-thirds of the new bus purchase funds to lower-emitting alternative fuel school buses (primarily CNG) and one-third of the new bus purchase funds to lower-emitting diesel school buses. While the Board's original intent was for this policy to be implemented on a regional basis, reduced funding levels during subsequent years of the program required ARB to implement this policy as a statewide goal, not a regional mandate.

For the 2005-2006 FY funds, the Board suspended the fuel funding split in order to facilitate the legislatively-directed replacement of California's oldest pre-1977 public school buses, in order of oldest bus first, but directed staff to reinstitute the funding split as a goal in subsequent funding years. When the Board issued this directive in February 2006, the primary school bus CNG engine manufacturer, John Deere had not announced its exit from the CNG engine market and, therefore, staff could not anticipate the disruption in CNG school bus engine availability that began in late 2007. Though a small number of John Deere engines are currently available and it is anticipated that Cummins will be moving into the school bus CNG engine market, staff does not recommend a specific funding goal for alternative-fueled engines, but acknowledges that certain air districts may want to encourage these engines.

D. CNG Fuel Tank Replacement

The Department of Transportation requires on-board CNG fuel tanks to be visually inspected every three years or 36,000 miles and replaced at the end of the manufacturer's recommended service life, which is typically 15 years. At the end of their service life, the fuel tanks on a CNG school bus must be replaced in order for the bus to remain in service. Since a typical school bus in California operates for 25 years or more, CNG school buses purchased in the early to mid- 1990s will require fuel tank replacements to remain on the road serving California's school children.

While developing the current Guidelines, ARB staff evaluated the feasibility of using a portion of the Proposition 1B funds available for bus replacements and retrofits to pay for fuel tank replacements on in-use CNG buses with expiring or expired tanks. Based on the legislative intent of Proposition 1B and constraints in the text of SB 88, ARB's legal staff has concluded that the funds cannot be used to pay for fuel tank replacements on older CNG buses.

The ARB staff encourages school districts to consult their local air districts regarding the availability of eligible funding sources, such as AB 2766 motor vehicle surcharge fees, to pay for or offset a portion of the cost to replace expiring or expired CNG fuel tanks. Some local air districts, notably the San Joaquin Valley Air Pollution Control District,

have already assisted school districts with the purchase of replacement fuel tanks for older CNG buses.

E. Matching Funds for 1977 – 1986 Model Year School Bus Replacements

These Guidelines continue the policy in previous guidelines of requiring a match contribution for new bus replacements. The policy ensures a cooperative relationship between the State, local air districts, and the school district further extending funds to maximize the number of eligible school buses that can be replaced. Therefore, school districts are required to contribute $25,000 in matching funds when replacing an eligible 1977 – 1986 model year bus through the Lower-Emission School Bus Program. The ARB's Executive Officer has the authority to adjust the district match requirement as necessary. Consistent with the match funding policy in previous Guidelines, air districts may also choose to provide the matching funds from an eligible funding source (e.g., motor vehicle surcharge fees) to assist school districts in need.

During the development of this Guideline revision, staff evaluated mechanisms to foster participation in the program's retrofit component that would have limited air districts' abilities to provide matching funds for new bus purchases. Specifically, air districts would have had the ability to provide a school district's matching fund contribution only if a school district obtained a matching fund waiver by agreeing to install ARB-verified retrofits on eligible buses, or by demonstrating that its fleet was already retrofitted or ineligible for retrofits. This mechanism was intended to encourage and incentivize retrofits in school bus fleets and to provide the means by which air districts could financially assist school districts.

Staff, however, is not including this mechanism in the revised Guidelines due to recent modifications to the ARB's proposed regulation for in-use on-road heavy-duty diesel-fueled vehicles. If approved by our Board, this proposed regulation could require school bus fleets to equip eligible buses with verified diesel emission control systems (i.e., ARB-verified retrofit devices) as soon as December 31, 2010. The ARB requires that air districts include a retrofit funding goal in their required Policies and Procedures Manuals to provide funds for school bus retrofits prior to implementation of the proposed regulation. Furthermore, it will behoove both school districts and air districts to familiarize themselves with this regulatory proposal, and we encourage school bus fleets to participate in the public rulemaking process for this proposed regulation, which is planned for presentation to the Board in mid-2008. More information regarding this regulatory effort, including appropriate ARB staff contacts and draft regulatory language, can be accessed from the ARB's web site at: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm .

III. LOWER-EMISSION SCHOOL BUS REPLACEMENT PROGRAM REQUIREMENTS

The school bus replacement program funds the purchase of new lower-emission school buses and infrastructure. With about $191 million available for grants, ARB staff estimates that all the remaining eligible pre-1977 model year school buses and about 1,000 additional 1977 to 1986 model year public school buses will be replaced with new clean school buses that also comply with the most recent motor vehicle federal safety standards

The following sections describe the protocols and criteria for the expenditure of program funds, as well as for new bus purchase funds from other sources of State funding which have specifically required that the Lower-Emission School Bus Program Guidelines be followed. It is important to understand that State program funds may only be used on school bus replacement projects that meet the criteria outlined in this chapter.

A. Eligible Buses and Infrastructure

This section provides a description of eligible program applicants and equipment.

1. Eligible Applicants

Public school districts in California that own their own buses are eligible to receive funding for the replacement of older school buses. Where a Joint Power Authorities (JPA) has been formed by several public school districts, and the JPA holds ownership of the school buses, then the JPA is also eligible to participate. School transportation contractors are not eligible to apply for school bus replacement funds. Also, school bus purchases by non-profit agencies, private schools, and other private companies are not eligible for State program funding.

2. Buses Eligible for Replacement

Older in-use diesel or gasoline school buses with a manufacturer's gross vehicle weight rating (GVWR) greater than 14,000 pounds may be eligible for replacement. Buses of this weight rating must be equipped with heavy-duty engines. To be eligible for replacement, buses must have a current CHP safety certification (CHP form 292) as of December 31, 2005, and have continuous safety certification from that point forward. This requirement will ensure unused buses are not revived in order to get funding. The period of certification must include the time a school district is awarded funding to replace the bus. The bus must also be currently registered with the Department of Motor Vehicles. While diesel-fueled buses are primarily targeted for replacement, gasoline-fueled buses that do not include an original-equipment catalytic converter are also eligible per the replacement priority given below.

SB 88 which provides legislative direction for the expenditure of Lower-Emission School Bus Program funds requires that all pre-1977 model year buses be replaced first. Hence the replacement of buses manufactured prior to April 1, 1977, when federal motor vehicle safety standards applicable to school buses went into effect, is a priority

for the school bus replacement program. Local air districts must commit by fully executed contract, all of their State program funds designated for pre-1977 model year school bus replacements by February 1, 2009. In addition, all replacement buses for pre-1977 model year buses must be paid for and in operation no later than February 1, 2010.

After ensuring funding for replacing pre-1977 buses, air districts will have the discretion to determine how to split their funding allocations between new school bus purchases (to replace 1977-1986 model year buses) and in-use bus retrofits (i.e., retrofitting in-use diesel buses with ARB-verified Level 3 devices). ARB staff estimates about 75 percent of the remaining funds will be used to pay for the replacement of up to 40 percent of all remaining eligible 1977-1986 buses (~2700 remaining). SB 88 states that an air district will replace the oldest school buses of model year 1977 to 1986. Therefore, air districts must preferentially choose for replacement the oldest school buses within their district that have applied for replacement and that meet the terms and conditions of these guidelines.

Eligibility for replacement will be based on the model year of the bus chassis for pre-1977 model year school buses. Replacing pre-1977 model year school buses is a priority since these model year buses predate any federal safety standards. Replacement eligibility of model year 1977 to 1986 school buses will be based on the model year of the school bus engine. Since, it is common practice to repower middle-aged buses with newer engines, determining emission benefits greatly depends on the model year of the engine.

All school buses replaced under the program must be dismantled in accordance with the definition of “dismantle” set forth in these Guidelines in Appendix A: Glossary of Administrative Terminology. School districts must ensure that the old school bus is dismantled within 60 days of the receipt of the new, replacement bus. For new buses, proof of new vehicle delivery and dismantling of the replaced vehicle must be provided before payment is made by the implementing agency.

3. Replacement Bus Requirements

Only replacement buses may be funded by this program, fleet expansion buses are not eligible for funding. New heavy-duty buses with engines that run on either diesel or an alternative fuel are eligible for funding, if the engine’s emissions are less than or meet the criteria shown in Table III-1. Program funds can only be used to purchase a new school bus that is equipped with essential or standard equipment. The recipient school district must make an enforceable commitment to own and operate the new bus for at least five years.

Alternative-fueled buses may be powered by natural gas, liquefied petroleum gas (LPG or propane), electricity, methanol, or ethanol fuels, provided that the other program requirements are met. Commercially available hybrid school buses may be partially eligible for funding. If a public school district elects to purchase a hybrid-electric school bus as their replacement bus, the program will cover the cost of the hybrid school bus

up to the cost cap for replacement buses described in Section D of this chapter, provided that the other program requirements are met.

B. Emission Standards and Certification Levels for School Buses

The ARB adopted more stringent emission standards for 2007 and subsequent model year new heavy-duty diesel engines, and the regulation became effective in November 2002 (see Title 13, California Code of Regulations, section 1956.8). More stringent emission standards were adopted for NO_x, non-methane hydrocarbons (NMHC), and PM.

Table III-1 below, shows the emission criteria that replacement school buses need to meet in order to qualify for program funding. Starting in 2007, the average heavy-duty NO_x emission standard is 1.2 g/bhp-hr. For this program, ARB will allow new buses that meet up to 1.44 g/bhp-hr NO_x emission standards, as there are a couple of common school bus engines that come in at this level. The 2007 model year Cummins ISB 6.8 liter diesel-fueled engine is currently certified to a significantly higher level, 2.2 g/bhp-hr NO_x+NMHC FEL. As such, its NO_x + NMHC emission level does not qualify it for funding under the Lower-Emission School Bus Program.

Table III-1
Emission Criteria for Use of Lower-Emission School Bus Program Funding

2007-2009 Model Year		2010 Model Year	
NO_x (g/bhp-hr)*	PM (g/bhp-hr)	NO_x (g/bhp-hr)	PM (g/bhp-hr)
1.44 NO_x FEL	0.01	0.2	0.01

FEL: family emission limit
g/bhp-hr: grams per brake horsepower-hour
* Both the NO_x FEL and the NO_x+NMHC FEL must be at or below 1.44 g/bhp-hr.

Table G-1, lists some ARB-certified heavy-duty school bus engines that are available in California and are eligible for funds under this program.

C. CNG Fueled School Buses

CNG fueled buses have proven to be very popular with school districts. The South Coast Air Quality Management District (SCAQMD) has had a fleet rule in effect that has required the purchase of new alternative-fuel school buses when replacing or adding

school buses within a fleet. Other air districts have been very proactive in advocating CNG-fueled school bus purchases. CNG engine availability issues have become a concern for school districts wishing to purchase additional alternative fueled school buses.

1. CNG Infrastructure and Fuel Tank Replacement

Ten percent of new bus funding for alternative-fueled buses may be used for refueling infrastructure when no local CNG refueling site is available or the existing local CNG refueling site is inadequate. This equates to about $14,000 per bus based on a $140,000 new CNG bus cost, excluding applicable sales tax. Infrastructure monies must be fully expended by the same deadline(s) by which the monies to purchase new buses must be fully expended. Infrastructure funds cannot be automatically set aside. Infrastructure funds may be utilized only if they can be tied to infrastructure funds spent for the specific bus purchased.

A typical school buses life of 25 years results in the need to replace the natural gas fuel tanks at lease once during the life of the bus. Based on the legislative intent of Proposition 1B and the constraints in the text of SB 88, Proposition 1B funds are not allowed to be used for the replacement of CNG fuel tanks on school buses. School districts should consult with their local air districts regarding the application process to receive AB 2766 funds for fuel tank replacement on in-use CNG-fueled school buses.

2. SCAQMD School Bus Fleet Rule

The SCAQMD adopted fleet rules in April 2001 requiring the purchase of alternative-fueled vehicles for certain fleets of 15 or more vehicles, when government funding for the incremental cost is available. SCAQMD Rule 1195, which applies specifically to school bus fleets, includes exemptions which allow diesel-fueled bus purchases in certain cases. However, the exemptions dealing with lack of available infrastructure and the lack of funding for infrastructure have sunset. For the past several years, the SCAQMD has only funded alternative-fueled school buses. However, some school districts in the SCAQMD still have an all diesel-fueled school bus fleet. Nothing within these guidelines is intended to supersede the SCAQMD rule. Therefore, school districts within SCAQMD may only be able to purchase alternative-fueled replacement school buses.

D. Cost Cap

Staff is proposing a cost cap per new school bus of $140,000. Combined with the match contribution (discussed below), diesel-fueled buses are expected to come well under the cost cap, CNG-fueled buses would be at the cost cap level, and hybrid buses would still be significantly over the cost cap. The cost cap is applicable to the cost of the replacement bus only including tax; funding for infrastructure to support alternative-fueled and hybrid-electric school buses is available in addition to the cost cap.

A typical transit style model year 2008 diesel-fueled school bus is estimated to cost approximately $140,000, including sales tax. When factoring in the match funding

requirement of $25,000 for each replacement bus, State program funds would pay approximately $115,000 of the replacement cost. A 2007 model year CNG-fueled school bus costs approximately $160,000. Therefore, State program funds would pay $135,000 towards the replacement cost of this bus. Finally, hybrid-electric school buses are currently estimated to cost above $200,000, in this case, State program funds would only provide $140,000 towards the replacement cost of this school bus.

Regardless of the type of fuel, no more than $140,000 may be spent to replace a school bus with State program funds. The ARB's Executive Officer has the authority to raise the cost cap, if needed, to accommodate future price increases.

E. Match Funds

School districts are not required to provide match funds for pre-1977 model year school buses, replaced with State program funding. This includes those buses manufactured before April 1, 1977. For the replacement of 1977-1986 model year buses, school districts must pay a $25,000 match per bus (about 18 percent of $140,000). The ARB's Executive Officer has the authority to adjust the district match requirement as necessary. This match requirement may be paid by the air district from eligible funding sources such as AB 2766 or AB 923 funds. The match requirement not only fosters a cooperative relationship between the State, the local air district and the participating school district, but also extends the program funds, replacing as many public school buses as possible.

Historically, the Lower-Emission School Bus Program has allowed air districts to provide match funding for new buses purchased through the program. Other grant funds, such as air district funds (e.g. motor vehicle registration fee monies) can be used to satisfy the school districts match fund obligation to the extent the other grant or funding language allows this. Proposition 1B funds alone are not sufficient to replace every 1977-1986 model year bus eligible for replacement. As partners in the Lower-Emission School Bus Program, air districts must share in the responsibility to provide low-polluting school transportation. At the local level, they have a greater ability to analyze the specific needs of the school districts in their regions and to determine how to best assist eligible school districts with the match funding requirements (e.g., air district provides full or partial match funds, based on school districts' needs). Every air district that generates funds through AB 923 (the $2.00 portion of motor vehicle registration surcharge fees) can reasonably provide the match funding for buses eligible for replacement in their respective regions.

Eligible air district funds can be also used to offset the higher cost of advanced technologies, such as hybrid-electric and alternative-fueled buses, if the cost for those buses exceeds the total of the cost cap and matching funds. Carl Moyer Program funds cannot be used as a source of the school district match funds.

F. Impact of the Seat Belt Law

Assembly Bill 15 (AB 15: Stats1999 Ch 648) initiated a requirement for lap/shoulder belts for all new school buses manufactured on or after January 1, 2002, that are purchased or leased for use in California, unless specifically prohibited by the National Highway Transportation Safety Administration. Implementation was delayed by Senate Bill 568 (SB 568: Stats 2001 Ch 581) until July 1, 2004, for new Type 2 small school buses and until July 1, 2005, for new Type 1 large school buses. The use of lap/shoulder belts will limit seating capacity on new buses to a maximum of two per seat.

Currently, school districts within California typically transport two older students per seat and three younger students per seat to comply with federal motor vehicle safety standards. Buses that only transport older children, those in seventh through twelfth grade, are not expected to lose seating capacity. However, school buses that currently transport primary school-aged children at a capacity of three children per seat will lose maximum seating capacity. This lower seating capacity of newer buses is further pressure on school districts to retain their older buses. However, ARB believes that given the opportunity to replace older in-use buses, school districts will elect to replace their older buses with new, cleaner and more efficient school buses that better protect their student's health.

IV. LOWER-EMISSION SCHOOL BUS RETROFIT PROGRAM REQUIREMENTS

The main goal of the Lower-Emission School Bus Program is to reduce children's exposure to diesel emissions from school buses. Retrofits are a vital component of the statewide program as school buses typically remain in service for extended periods of time. Retrofitting in-use diesel school buses will result in significant diesel emission reductions that are immediate, will benefit children's health and are the most cost effective use of these funds. Because of the importance of this component of the program, the ARB has designated a total of $29 million in funds to pay for nearly 4,000 retrofits since the program began in 2000, excluding the current bond funding.

SB 88 which establishes how the Proposition 1B funds for school buses will be allocated, gives air districts the discretion to determine how to split their funding allocations between new school bus purchases and in-use bus retrofits.

This chapter not only presents the criteria for selecting eligible school bus retrofit projects, but it also describes upcoming retrofit regulations as they pertain to school buses and potential impacts to future State funds.

A. Upcoming Retrofit Regulation

Since 1998, when diesel PM was identified as a toxic air contaminant, ARB has been developing and implementing a regulatory program focused on achieving 85 percent reduction in diesel PM emissions by 2020. To date, ARB has adopted 17 regulations that reduce both NO_x and PM from heavy-duty on- and off-road fleets, as well as, stationary engines. Following ARB's plan, the Board is tentatively scheduled to consider the Proposed Regulation to Reduce Emissions from Diesel Particulate Matter, and Other Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles in the fall of 2008. This proposed regulation is designed to reduce both NO_x and PM emission from heavy-duty on-road private fleets, including, school buses in public and private fleets. Staff expects to propose that, the in-use fleet of school buses be required to be retrofitted with an applicable Level 2 or Level 3 verified diesel emission control strategy beginning December 31, 2010, and 100 percent of the fleet be retrofitted by the end of 2013. Below is a link to the ARB website with information on the proposed in-use on-road heavy-duty regulation http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm .

It is important for the local air districts to have a robust retrofit program in place for local school districts to retrofit applicable school buses before required by the proposed in-use heavy-duty diesel vehicle regulation. This will help assure that state funds are available to help school districts comply with the proposed rule. If these state funds are not used for retrofits, the cost of compliance with regulatory requirements will fall on school districts. The School Bus Program funding timeline, Table D-1, should be reviewed to ensure that retrofit funds are available in a timely manner.

B. Eligibility Requirements

1. Eligible Applicants

Public school districts that own their own buses are eligible to receive funding for retrofits; this also includes Joint Power Authorities (JPAs) formed by several public school districts where the JPA holds ownership of the school buses. Private school transportation providers that contract with public school districts to provide transportation services are also eligible to receive retrofit grant funding. Successful applicants must make an enforceable commitment to own and operate the retrofitted bus for at least five years.

2. Buses Eligible for Retrofit

All 1987 and eligible newer model year in-use diesel-fueled buses with current CHP safety certifications qualify for retrofits, provided there is an ARB-verified retrofit device available for the engine. However, retrofit devices may be more readily obtainable for model year buses 1994 and newer. The cost for available devices and the longer remaining project life of the 1994 and newer model year buses are important considerations when selecting which buses to retrofit. Device installers and vendors can provide assistance in this regard. Both Type I and Type II school buses may be eligible. There is not a GVWR requirement of over 14,000 pounds, however some of the ARB-verified device Executive Orders may require this in their terms and conditions. The focus is on retrofitting the highest polluting buses that can be reliably retrofitted with diesel particulate filters (DPFs)

3. Eligible Diesel Emission Control Devices – Availability, Funding Requirements & Maintenance

All retrofit devices that are purchased with State program funding must be ARB-verified Level 3 retrofit technologies. The ARB verifies diesel emission control strategies as prescribed in Title 13, California Code of Regulations (CCR) sections 2700 through 2710, Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines.

Level 3 verification is for those technologies achieving at least an 85 percent or greater reduction in PM or less than 0.01 g/bhp-hr emission level. A current list of all ARB-verified devices can be accessed through the ARB web site at: http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm . The use of fuel additives is not allowed by most device Executive Orders and may only be used if expressly stated in the device's Executive Order. Retrofit technologies currently verified for school bus engines are listed in the Appendix H which is current as of January 2008. However, school districts or other implementing agencies should check this web site prior to ordering any devices for their program, as there may be changes or additions.

Amendments to the Verification, Warranty, and In-Use Compliance Procedures were adopted on March 23, 2006. This regulation raised the NO_2 limit for verified diesel emission control devices to allow continued use of most currently verified devices

through 2007, and created the “Plus” designation for verified technology that achieves more stringent NO_2 requirements. For a device to meet new compliance standards in 2009, a verified device may not increase baseline NO_2 emissions of the engine it is installed on by more than 20 percent beginning January 1, 2009. After the aforementioned date, strategies that do not meet this new compliance standard will not be for sale in California, and will not be fundable.

Some of the retrofit devices are verified for use with biodiesel blends subject to certain conditions. Those conditions are posted on the ARB web site at http://www.arb.ca.gov/diesel/verdev/reg/biodieselcompliance.pdf and are as listed below:

- The biodiesel portion of the blend shall be 20 percent or less of the fuel;
- The use of biodiesel applies to devices verified to reduce only diesel PM; and
- Other alternative diesel fuels such as, but not limited to, ethanol diesel blends and water emulsified diesel fuel are excluded.

Use of biodiesel blends that meet these specifications do not void the warranty for the retrofit devices verified for use with biodiesel blends. Appendix I, provides a more in depth discussion on biodiesel use with retrofits and new school bus engines.

Table IV-1 lists the engines commonly applicable to school buses and the model years that can be retrofit with a diesel particulate filter. Retrofit manufacturers include Cleaire, Donaldson, International, Johnson Matthey, and Lubrizol. More complete information on verified Level 3 retrofit devices and the engines and operating requirements for their application can be found at the ARB web site: http://www.arb.ca.gov/diesel/verdev/level3/level3.htm .

Table IV-1
Common School Bus Engines Eligible for Retrofit

Engine Manufacturer	Applicable Common School Bus Engine Models(a)	Engine Model years(b)
International	DT 466, DT 466E, T444E, 7.3 L, 6.0 L	Broad applicability for 1994 – 2003. Partial availability for 1993 and 2004-2006 Limited availability for pre-1993
Caterpillar	3116, 3126, 3176, C-7	
Cummins	B3.9L, B5.9L, C8.3L, ISB, ISC	

(a) DPFs are applicable to other engine models
(b) Verification as of January 28, 2008. Further verification is currently in progress to potentially include older model year engines.

C. Cost Estimate for Retrofits

ARB will pay up to $20,000 to cover the cost of the retrofit, necessary data logging and installation, and maintenance for the device. In most cases ARB staff expects the cost to be significantly less. These funds will cover the full cost of the retrofit since several passive diesel particulate filter systems are available for about $9,000 and active systems are available for about $16,000. Staff expects the passive type of system to be the most common system funded due to its broad applicability for 1994 and newer model year school buses and its relative low cost. However, active systems (requiring a plug-in for regeneration) are also available that have even greater applicability, especially for older buses. After a cost analysis, if the $20,000 cost cap is prohibitive, districts may contact ARB staff regarding a waiver option. Waivers will be considered only on a case-by-case basis and only if a cost analysis has been performed.

1. Maintenance Costs

Within the $20,000 retrofit funding cap, as discussed above, ARB will allow implementing agencies to allocate up to $2,500 to pay for DPF maintenance (baking and de-ashing). This amount adequately covers anticipated maintenance costs, however; ARB expects it to be less. Hence, documentation in the form of an invoice or purchase order that states the date of maintenance, description of service performed, and cost of service must be submitted to the implementing agency to justify reimbursement of these costs.

DPF devices require periodic maintenance to remove ash caused by motor oil combustion residues. As previously mentioned, depending on the condition of the engine and number of miles driven, periodic maintenance is done every 6 to 24 months. This can be handled by a maintenance contract at the time of device purchase, periodic cleaning by an outside contractor, or cleaning by the bus maintenance personnel. If the bus maintenance personnel perform this function, either a DPF de-asher must be purchased or the DPF must be taken offsite for cleaning. The cleaning option chosen may be based on the number of DPFs to be cleaned, whether buses can be out of service while the DPF is taken off site, and the workload of the maintenance personnel. For fleets that have at least six retrofits, it is more economical for the State to pay for a de-ashing system, rather than periodic maintenance and districts are encouraged to consider this option.

A de-asher to clean retrofit filters on-site may be a cost saving option if several retrofits are in service in a district. This option should be evaluated in terms of the number of DPFs on existing buses, including all new replacement buses which come with a filter, the expected lifetime cleaning costs of the DPFs, and the cost of the de-ashing system versus the cost per cleaning. The ARB estimates a cost of $2,500 over an expected 11-year remaining bus life based on the assumption that the DPF requires cleaning once every two years at a cost of up to $400 per cleaning.

Implementing agencies may also use State funds to pay for spare back-up filter(s). During normal filter maintenance, retrofit devices are removed from the school bus for

several hours for cleaning and de-ashing. A back-up filter will allow the bus to continue operating during this time. This is an advantage to school districts as there will be no disruption in their ability to provide transportation to students. ARB will only allow funds to pay for one spare filter for up to twenty in-service retrofits. The average cost of a spare filter is approximately $3,000.

With the implementation of the upcoming proposed In-Use On-Road Heavy-Duty Diesel Vehicles regulation which will essentially require DPFs be installed on all buses by the end of 2013, ARB will leave it up to the discretion of the implementing agency whether or not to pay for the cost of filter maintenance for school districts. If maintenance costs are not covered, additional DPFs will be able to be purchased and installed on more buses with available Proposition 1B funds, which will further reduce PM emissions.

2. Data Logging

Not every retrofit technology is appropriate for every school bus and every school bus route. Matching the appropriate technology to each bus and route can be accomplished by data logging the bus to determine that the exhaust gas temperatures generated during normal operation meet the regeneration requirements for the device.

To ensure that an appropriate emission control technology is installed on each bus, funding of $300 per bus shall be included in the funded amount to cover the cost of data logging for the candidate bus operating conditions.

D. CHP Inspection Prior to Return to Service

Any school bus that has had an emission control retrofit device installed must receive a CHP safety inspection [(per Title 13, California Code of Regulations (CCR) section 1272(c)] prior to its return to service. This inspection is to determine if the retrofit device installation or other modification was performed according to the manufacturer's procedures and it is required in order to protect the school district and the children in the case of improper installation or modification.

To meet the terms of the retrofit contract, a copy of written documentation from CHP personnel that the retrofitted bus is still structurally acceptable to safely transport students is required. This should be obtained by the applicant after the CHP has conducted an inspection. The school district is required to provide documentation to the air district that consists of:

A copy of a completed CHP form 343 – Safety Compliance Report/Terminal Record Update, OR a copy of a completed CHP form 343A – Vehicle/Equipment Inspection Report Motor Carrier Safety Operations.

V. ADMINISTRATIVE RESPONSIBILITIES OF AIR DISTRICTS AND THE ARB IN IMPLEMENTING THE LOWER-EMISSION SCHOOL BUS PROGRAM

This chapter formalizes the minimum administrative requirements that the ARB and local air districts must follow to implement the Lower-Emission School Bus Program. The chapter outlines the ARB's responsibility for overall program administration and oversight, and describes the minimum administrative requirements that air districts must follow to ensure that program goals are achieved.

Because the funding for the continuation of the Lower-Emission School Bus Program comes from a voter-approved initiative (i.e., Proposition 1B), expenditures from this source are subject to both State requirements and recent mandates outlined in SB 88 and the three-part accountability structure set forth in EO S-02-07. Together, both mandates require an increase in transparency for the bond proceeds expenditure process. Hence, the chapter includes strengthened expenditure, auditing, reporting, records retention, and contract language requirements that are necessary for compliance with State requirements. The unprecedented level of State funding for this round of the Lower-Emission School Bus Program necessitates a more robust oversight process, and program improvements are a result of lessons learned through auditing conducted by the DoF and the ARB.

A. EO S-02-07

Proposition 1B funding must be spent pursuant to the requirements of EO S-02-07, which sets forth a three-part accountability structure for the expenditure of bond proceeds. The ARB's three-part accountability structure for the Lower-Emission School Bus Program consists of: 1) Front-End Accountability: Following an open public process, the Air Resources Board approved the Guidelines that address the criteria that will govern the expenditure of Proposition 1B funds, and the outcomes that such expenditures are intended to achieve. The Guidelines include funding allocations for local air districts (see Appendix B). 2) In-Progress Accountability: The ARB is required to submit semiannual reports to the DoF to ensure that the projects funded with Proposition 1B proceeds are being executed in a timely fashion and achieving their intended purposes. To facilitate data collection for these reports, implementing agencies are required to input program information into an on-line transportation bond accountability database that is being developed by the ARB. The database is expected to be operational in spring 2008. 3) Follow-up Accountability: The administrative and implementing agencies must adhere to the record keeping and documentation requirements set forth in the Guidelines, and these agencies are subject to audit.

B. SB 88

SB 88 directs the ARB to allocate Proposition 1B funds by first setting aside funds to replace the remaining 1976 and older model year school buses in California. Remaining funds are to be allocated to air districts based on each district's share of the 1977-1986 model year school bus population. After ensuring funding for replacing all pre-1977 model year buses, SB 88 provides flexibility by allowing air districts the discretion to determine how to split their remaining allocation between replacing

1977-1986 model year buses and retrofitting buses. SB 88 states that an air district will replace the oldest school buses of model year 1977 to 1986. Therefore, air districts must preferentially choose for replacement the oldest school buses within their district that have applied for replacement and that meet the terms and conditions of these guidelines. Air district funding allocations are provided in Appendix B.

In addition to setting the key allocation provisions for Proposition 1B funding for the Lower-Emission School Bus Program, SB 88 also:

- Requires recipient (also known as implementing) agencies to submit semiannual and final reports to the ARB, and requires the ARB to submit those reports to the DoF. To reduce the reporting burden on implementing agencies, the bond accountability database is designed to collect data for both bond accountability and SB 88 reporting requirements.

- Requires these Guidelines to:

    - Provide for the audit of project expenditures and outcomes;
    - Require that the useful life of the project be identified as part of the project nomination process; and
    - Require that project nominations have project delivery milestones.

C. Matching Funds

There is no match funding requirement for new buses purchased to replace pre-1977 model year school buses. This includes buses manufactured before April 1, 1977. For the replacement of 1977-1986 model year buses, a match funding requirement of $25,000 per new bus. The ARB's Executive Officer has the authority to adjust the match requirement as necessary. Matching funds may be provided by the school district, or any other eligible source, including motor vehicle registration fee monies (e.g., Assembly Bill 923 and Assembly Bill 2766 funds) provided by the local air district.

D. Administrative Funds

An air district may use up to two percent of its total allocation of State program funding for implementation and outreach costs. In addition, air districts may use up to five percent of State program funding designated for retrofits (see Section K of this Chapter) to implement the program's retrofit component (in addition to the aforementioned two percent).

Air districts must account for administrative and project funds separately. Expenditures of Lower-Emission School Bus Program State program funding, including funds used to cover administrative costs, are subject to audit.

1. Allowable Costs

Administrative funds shall only be used for costs associated with the program implementation-related tasks outlined in these Guidelines and must be documented by

the air district. Administrative funds shall be used for Lower-Emission School Bus Program implementation and outreach, including: district staff time; consultant fees; printing, mailing, and travel costs; project monitoring and compliance expenses; and indirect costs, such as general administrative services, office space, and telephone services.

2. Required Documentation

Air districts must maintain documentation of Lower-Emission School Bus Program funds used for implementation and outreach. Districts must keep the following documentation:

- Personnel documentation must make use of timesheets or other labor tracking software. Duty statements or other documentation must be used to verify actual hours or percent of staff time devoted to Lower-Emission School Bus Program implementation and outreach.

- Consultant fees must be documented with copies of the consultant contract and itemized invoices.

- Printing, mailing, and travel expenses must be documented with receipts and/or itemized invoices.

- If travel and per diem expenses are used to document program implementation costs, allowable travel costs and per diem rates must be described in the district's Policies and Procedures Manual. District travel cost criteria must be consistent with the district's written travel policies for other district programs. Alternatively, if these definitions are included in local administrative code or other document, the district may cite the document that governs its practices in the Policies and Procedures Manual.

- Indirect cost calculation methodologies, if used to determine indirect costs of program implementation, must be fully described or referenced in the district's Policies and Procedures Manual. Districts must maintain documentation for all costs referenced in the indirect cost calculation formula.

The aforementioned documentation, records, and referenced materials must be made available for review during ARB or other State agency monitoring visits and audits. These records must be retained for the contract term plus two years.

Districts shall reconcile program and fiscal records at least twice per year.

Districts that charge unallowable costs for program implementation or outreach shall be required to substitute eligible implementation and outreach funds equal to the dollar amount found ineligible, or return the funds for the unallowable cost to the ARB.

E. Assembly Bill 923 Funds

Funds provided through Assembly Bill 923 (AB 923, Stats 2004 Ch 707) are another possible source of new school bus purchase funding. This legislation has provided a mechanism for air districts to increase the motor vehicle registration fee surcharge from four dollars to six dollars. The additional two dollar surcharge may be used by air districts for four different clean air categories, including the "new purchase of school buses pursuant to the Lower-Emission School Bus Program adopted by the state board."[2]

AB 923 funds may be used to meet the match funding requirement for replacing 1977-1986 model year buses. If an air district uses AB 923 funds as the primary source of funding to replace a 1977-1986 model year bus, the air district may also cover the match funding requirement with AB 923 funds.

AB 923 requires that the purchase of school buses with AB 923 funds be pursuant to the Lower-Emission School Bus Program Guidelines; however, AB 923 funds are not subject to all of the restrictions, such as the expenditure deadlines, that apply to Lower-Emission School Bus Program State program funding. These Guidelines include provisions to cover requirements specific to 2007 Budget Act funds, as well as provisions generally applicable to all funds to be spent pursuant to the Guidelines.

AB 923 funds allocated to the purchase of new school buses are subject to these Guidelines, with the following exceptions:

- The dates in the Lower-Emission School Bus Program Timetable do not apply to AB 923 funds.

- Air districts should report expenditures of AB 923 funds, including AB 923 funds spent pursuant to the Lower-Emission School Bus Program Guidelines, through a process established within the 2008 Carl Moyer Program Guidelines.

- On a case-by-case basis, an air district may use AB 923 funding as the primary source of funding to replace a school bus that has a CHP safety certification (CHP form 292) that has lapsed in the past. In this instance, the bus must have a current CHP safety certification (CHP form 292), and the air district must make the determination that the school bus is being used regularly by the school district.

F. Assembly Bill 2766 Funds

Revenues collected from the first four dollars of the motor vehicle registration fee surcharge, authorized by the passage of Assembly Bill 2766 (AB 2766, Stats 1990 Ch 1705), are to be used for the reduction of air pollution from vehicles. These

[2] Assembly Bill 923, Firebaugh, Chapter 707, Statutes of 2004. Available at http://www.leginfo.ca.gov/pub/03-04/bill/asm/ab_0901-0950/ab_923_bill_20040923_chaptered.html.

revenues have been used to replace school buses, but also have greater flexibility. These funds may be used by air districts to fund the replacement of on-board fuel tanks on school buses operating on compressed natural gas (CNG), to fund retrofits, or to fund the match requirement.

G. Milestones and Timetable for State Program Funding

This section covers key program milestones, an abridged timetable (Table V-1), and describes remediation plans and reconciliation requirements, for the Lower-Emission School Bus Program. The dates listed in Table V-1 are the final dates for execution of the designated activities conducted with State program funding. The expanded timetable is provided in Appendix D.

1. Milestones

This section further describes some of the major performance milestones set forth in the expanded program timetable (Appendix D). Air districts must meet these milestones in order to demonstrate progress in meeting the goals of the Lower-Emission School Bus Program.

- Beginning on **April 30, 2008**, the ARB will make State program funds available to air districts by mailing Grant Award and Authorization Forms to air districts. An air district may begin requesting funds after its Policies and Procedures Manual (see Section K) is approved by the ARB. An air district must provide the documents listed in Section J.1 to receive its initial disbursement.

- Beginning **February 1, 2009**, when the air districts' first semiannual reports are due, ARB will perform a needs assessment to check each air district's progress and ability to implement a local program.

- By **March 1, 2009**, based upon air districts' February 1, 2009 demonstration of performance, the ARB will determine if direct implementation – that is implementation of a local program by the ARB, with CAPCOA's assistance – of additional local programs is necessary. The funds spent within each air district will be the same regardless of what organization implements the program.

- **August 1, 2009**. If an air district does not meet the milestone(s) for this date, then the air district must submit a remediation plan to the ARB.

- **February 1, 2010**. If an air district does not meet the milestone(s) for this date, then the air district must submit a remediation plan to the ARB.

- **August 1, 2010**. If an air district does not meet the milestone(s) for this date, then the air district must submit a remediation plan to the ARB.

Table V-1 Abridged[(a)] Lower-Emission School Bus Program Timetable	
Dates	**Milestones**
March 27-28, 2008	**Board approves air district allocations and Guidelines**
April 30, 2008	**Funds made available to air districts**
Beginning May 2008 and ongoing	**Initial disbursements to air districts based on readiness** • Policies and Procedures approved by ARB; previous years' funds expended by appropriate deadlines **Additional disbursements to air districts based on demonstrated need (i.e., 50% of funds from all previous disbursements under contract)** • Up to 65% of its total allocation through June 30, 2009 **ARB/CAPCOA begin direct implementation of funds, where applicable**
June 30, 2008	**100% of funds encumbered by ARB through Grant Award and Authorization Forms**
February 1, 2009	**First semiannual report due/performance milestone(s)** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB – these steps must be taken for all semiannual reports and the final report) • Districts with pre-1977 buses: 100% of pre-1977 replacements under fully executed contracts and ordered • Districts without pre-1977 buses: 10% of retrofit funds and 10% of 1977-1986 bus replacement funds under fully executed contracts
March 1, 2009	**Based upon February 1, 2009 demonstration of performance, ARB determines if direct implementation (by ARB/CAPCOA) of additional local programs is necessary**
June 30, 2009	**Deadline for ARB to encumber all funds**
August 1, 2009	**Second semiannual report due/performance milestone(s)** • 50% of an air district's total allocation under fully executed contracts
February 1, 2010	**Third semiannual report due/performance milestone(s)** • 100% of pre-1977 bus replacements paid for and in operation • 100% of 1977-1986 bus replacement funds under fully executed contracts and buses ordered • 50% of an air district's retrofit commitment under fully executed contracts • 10% of an air district's retrofit funds spent and retrofitted buses in operation
June 30, 2010	**Retrofit funding may no longer be available for school buses due to proposed In-Use On-Road Heavy-Duty Diesel Vehicles Regulation**
August 1, 2010	**Fourth semiannual report due/performance milestone(s)** • 100% of an air district's total allocation under fully executed contracts
February 1, 2011	**Fifth semiannual report due/performance milestone(s)** • 25% of 1977-1986 bus replacement funds paid out • 50% of retrofit funds spent and projects in operation
April 1, 2011	**All new buses delivered and infrastructure completed**
June 30, 2011	**Deadline for full expenditure of Proposition 1B funds** • 100% of funds paid out; all projects/equipment in operation • Funds outstanding as of this date must be returned to ARB within 60 days
August 1, 2011	**Final report due**
(a) This table contains a brief overview of milestones. Details regarding the criteria air districts must follow to meet these milestones are provided in the expanded timetable in Appendix D and throughout this chapter of the Guidelines.	

2. Remediation Plans

ARB staff will meet with non-performing districts and develop remediation plans with the objective of meeting program goals, recognizing that the situation will be different in each district.

3. Reconciliation

District Lower-Emission School Bus Program staff shall meet with the appropriate district fiscal staff at least twice per year – particularly in preparation of semiannual and final reports – to reconcile program funds.

H. Implementation Options

There are three options for implementation of the Lower-Emission School Bus Program:

- Self-implementation by an air district
- Regional implementation by a neighboring air district
- Implementation by the ARB with assistance from CAPCOA

The funds spent within each air district will be the same regardless of what organization implements the program. In air districts for which the ARB implements the Lower-Emission School Bus Program, CAPCOA will assist with outreach to school districts and will assist school districts with the application process.

I. Funding Agreements/Awards to Implementing Agencies

The ARB staff will initiate grant award agreements for State program funds:

- With air districts that will implement the Lower-Emission School Bus Programs in their respective regions.
- With school districts directly in air districts that do not implement the Lower-Emission School Bus Program.

Eligible school districts shall be contacted by the air district, ARB, or the CAPCOA and asked to apply for State program funds.

J. Fund Disbursement to Air Districts

An air district will not receive any disbursements if it has unexpended (i.e., not paid out) State program funds from any fiscal years (FY) prior to the 2005-2006 FY. The air district must either demonstrate that those funds have been paid out, or must return the previously unused funds to the ARB.

Beginning July 1, 2008, air districts that have unexpended funds from the 2005-2006 FY will not be able to receive any disbursements until those funds have been paid out or returned to the ARB.

1. Initial Disbursements

The air districts shall provide the following documents in order to receive their initial disbursements:

- The grant agreement, provided by the ARB, signed by an air district official with fiscal authority.
- A resolution from the air district governing board (or other documentation signed by a duly authorized official) that authorizes the air district to accept the funds.
- A Policies and Procedures Manual (a complete Polices and Procedures Manual must be submitted to and approved by the ARB, in writing, before a district is eligible to receive its initial funding disbursement; required contents are described in Section K of this chapter)
- A Grant Disbursement Request. The Grant Disbursement Request form must be signed by an air district board-authorized party. If there are stipulations on the Grant Award and Authorization form, all stipulations must be met prior to submitting the initial disbursement request.
- Documentation described in Section Q.1 (Documentation of Expenditure of Previous Grant Awards) of this chapter, if this documentation has not already been submitted.

Initial disbursements will be made to air districts based on their readiness. For its initial disbursement, an air district should request:

- 100 percent of the allocation designated for replacing pre-1977 model year buses, if applicable; and
- 10 percent of the remainder of the allocation; and
- 50 percent of its administrative funds. Air districts will receive one check for both administrative and project funds. However, air districts must account for the administrative and project funds separately.

An air district may receive up to 65 percent of its total allocation through June 30, 2009.

2. Additional Disbursements

Additional disbursements will be made to air districts based on demonstrated need, i.e., at least 50 percent of funds from all previous disbursements must be under contract. For additional disbursements of Lower-Emission School Bus Program State program funds, air districts must submit a Grant Disbursement Request and provide documentation (i.e., copies of fully executed contracts) that 50 percent of the funds from all previous disbursements are under contract.

An air district may request the other half of its administrative funds when 50 percent of the funds in its full Lower-Emission School Bus Program allocation have been committed. The air districts will again receive one check for both administrative and project funds and must account for the administrative and project funds separately.

K. Policies and Procedures Manual

As a prerequisite for receiving the initial funding disbursement, an air district must submit a Lower-Emission School Bus Program Policies and Procedures Manual to the ARB. The manual must describe the district's policies, procedures, and organizational structure for the Lower-Emission School Bus Program. The submitted manual shall apply to the current funding cycle. A complete Policies and Procedures Manual must be submitted to and approved by the ARB, in writing, before a district is eligible to receive its initial funding disbursement. The Policies and Procedures Manual must include, at a minimum:

1. Retrofit Implementation Plan

As an air quality agency, the ARB recognizes that retrofits are an efficient and cost effective means of reducing PM emissions. State program funding for new buses has been well-received and oversubscribed in the past, while greater effort is needed to spend retrofit funds. However, the positive public health impact of State program funding is greater for funds spent on retrofitting in-use diesel buses. Each in-use diesel bus that is retrofitted with a Level 3 diesel particulate filter emits 85 percent less toxic PM. This strategy provides the most cost-effective air quality benefit, since a retrofit costs about 10 percent of the purchase price of a new bus.

The retrofit implementation plan must include the air district's commitment of funds – as a percentage of the amount left over after funds are allocated for replacing pre-1977 model year buses – for equipping in-use buses with ARB-verified Level 3 diesel emission control retrofit devices. The ARB strongly recommends 25 percent. In addition, the air district must describe the steps that it will take to remedy the situation if it falls short of any retrofit-related performance milestones.

2. Air District's Commitment to 1977-1986 Model Year School Bus Replacements

The air district must describe its commitment of funds for replacing 1977-1986 model year school buses. In addition, the air district must describe its process for selecting and awarding funds to replace 1977-1986 model year buses (see Section N of this chapter), and under what conditions air district funds will be used to provide match funding, if applicable. SB 88 states that an air district will replace the oldest school buses of model year 1977 to 1986. Therefore, air districts must preferentially select for replacement the oldest school buses within their district that have applied for replacement and that meet the terms and conditions of these guidelines.

3. Description of Local Program Components

The Policies and Procedures Manual must contain a description of the air district's day-to-day process for implementing the Lower-Emission School Bus Program, as well as the following components:

- Program structure and organization, including coordination with the ARB

- Process for applying for funds from and accepting funds from the ARB
- Project solicitation, evaluation, and selection (including schedule for program implementation)
- Environmental justice (if applicable)
- Fund commitment and expenditure
- Fiscal practices and procedures for payments, interest, and reconciliation
- Project reports
- Contract components and contracting process with applicants
- Invoice review, approval, and payment protocols
- District audits of projects
- Details regarding program components identified in the Administrative Funds section of this chapter

L. Implementing Agencies' Lower-Emission School Bus Program Notification of School Districts

Implementing agencies (air districts or ARB/CAPCOA) shall notify school districts of opportunities to participate in the Lower-Emission School Bus Program. The ARB will monitor the ongoing implementation of both program components and assist the implementing agencies where needed. ARB district liaisons will review semiannual reports, provide technical assistance, and attend outreach events.

1. Outreach

Outreach prior to and during the time frame of program notification is critical for the success of a local program. The implementing agencies should focus their outreach in a way that encourages applications from all school districts, including environmental justice communities and rural districts. Below are brief descriptions of the types of practices that might be included as part of an implementing agency's outreach activities. If possible, implementing agencies should employ all of the following practices.

(a) List of School Districts

Implementing agencies should maintain a list of school districts within their respective regions and the contact information for the school bus fleet maintenance personnel. A notification should be mailed to the contacts on the list when funds are available.

(b) Local Newspaper Announcement

Implementing agencies are encouraged to put an announcement in local newspapers and in appropriate local newsletters.

(c) Web Site Notification

If an implementing agency has a web site, the Lower-Emission School Bus Program opportunity notice should be advertised on the implementing agency's web site. If the implementing agency has a newsletter, the Lower-Emission School Bus Program opportunity notice should be advertised in the implementing agency's newsletter.

(d) Site Visits and Workshops

Implementing agencies are encouraged to conduct site visits or telephone conference calls with school districts, particularly to advise them of the opportunity to participate in the retrofit component of the program. Implementing agencies are also encouraged to hold pre- and post-award funding workshops.

M. Higher-Risk Communities, Including Environmental Justice Communities

It is important that school bus projects funded through the Lower-Emission School Bus Program benefit all communities of California, particularly those disproportionately affected by air pollution. Health and Safety Code (HSC) section 43023.5 requires air districts with a population of one million residents or greater to ensure that not less than 50 percent of the funds appropriated by the State Legislature for programs for the purchase of reduced-emissions school buses "are expended in a manner that directly reduces air contaminants or reduces the public health risks associated with air contaminants in those districts, including, but not limited to, airborne toxics and PM, in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, or both." The ARB, CEC and local air districts have worked cooperatively to implement this requirement affecting State funding appropriations within the Lower-Emission School Bus Program beginning in 2001, when the statute first went into effect.

For the State program funds now available for the Lower-Emission School Bus Program, the Legislature has directed that the funds be allocated following the criteria set forth in SB 88. That legislative directive takes precedence over environmental justice criteria for Lower-Emission School Bus Program State program funding. For AB 923 funding, and for other air district funding, the ARB encourages air districts to consider environmental justice; therefore, a discussion of environmental justice criteria follows.

While HSC 43023.5 affects only State funding appropriations, the ARB encourages air districts to expend their local AB 923 funds dedicated to new school bus purchases, and other local funds used for new school bus purchases, in a manner consistent with the HSC provision.

To assist air districts in their efforts to focus funds for new school bus purchases in communities pursuant to HSC 43023.5, the ARB has developed recommended criteria for use in the Lower-Emission School Bus Program. While the ARB recognizes that communities disproportionately affected by air pollution are not limited to low-income communities and/or communities of color, the ARB-recommended criteria use the percentage of students within a public school district participating in the free and reduced-lunch meal program as a consistent statewide method to identify schools in which to target funds for new school bus purchases. Alternatively, air districts may

develop different criteria, in consultation with ARB staff, to identify communities in which to focus funds for new school bus purchases.

N. Process of Making Awards to Successful Applicants

The implementing agency (air district or ARB/CAPCOA) shall contact all school districts in its respective region. The implementing agency shall determine the application due dates necessary to complete the program according to the expanded program timetable in Appendix D. School districts desiring to replace or retrofit buses must submit an application to the implementing agency by the date(s) determined by the implementing agency.

Buses shall be replaced following the allocation criteria set forth in SB 88. SB 88 states that an air district will replace the oldest school buses of model year 1977 to 1986. Therefore, air districts must preferentially choose for replacement the oldest school buses within their district that have applied for replacement and that meet the terms and conditions of these guidelines. The implementing agency will review the application for completeness and eligibility and award grants through a process that must be described in an air district's Policies and Procedures Manual. The implementing agency must retain documentation of its implementation of that process. School districts shall be notified by mail after awards are approved by the implementing agency.

Applicants for retrofit funding must complete an application for Lower-Emission School Bus Retrofit Program grant money and submit it to their local implementing agency. The implementing agency shall review the application for completeness and eligibility and make grant awards. Applicants shall be notified by mail after awards are approved by the implementing agency.

Staff at the implementing agency shall prepare funding agreements that set forth the terms, conditions, and reporting requirements for each grant. No funds will be released until the school district and the implementing agency have signed the funding agreement.

Implementing agency staff shall notify the ARB when retrofit funding availability is announced and when retrofit funds are released so that ARB may notify CHP of the bus modifications. In practice, this means that when an implementing agency sends out a Lower-Emission School Bus Program opportunity notice to school districts and private transportation contractors to inform them that retrofit funds are available, the air district must send a copy of the opportunity notice to ARB staff. Opportunity notices are often in the form of a program announcement and application package, request for proposal, request for application, etc. In addition, when an implementing agency makes an award of Lower-Emission School Bus Program retrofit funds, the implementing agency must inform ARB of the amount and recipient of the award.

1. Applications

Applicants must sign and date applications.

(a) New School Bus Purchase

Air districts must ensure that project applications include the specific information needed to populate the bond accountability database (See Appendix J) and collect the following information:

For each bus that will be replaced:

- Copy of bus registration
- Total mileage
- Mileage for last school year
- Copy of the Inspection Approval Certificate (CHP form 292) that shows that it has been continuously certified as of December 31, 2005.
- Method of bus disposal

For each new bus that will be purchased:

- Assumed date of delivery
- Engine horsepower
- Availability of refueling capability and delivery of fuel by bus delivery date
- Source of any match funding
- If requesting alternative fuel and electric infrastructure funding: demonstrated need based on accessibility of off-site station; cost of CNG slow-fill equipment; cost of recharging station.

Air districts must also ensure that project applications inform applicants that for the purchase of new school buses to replace buses of any eligible model year, the liquidated damages clause set forth in Appendix C: Minimum Contract Requirements of these Guidelines must be included in the terms and conditions of the purchase order agreement between school districts and school bus distributors.

Grant applications must include a resolution from the school district governing board (or a duly authorized official with authority to make financial decisions) authorizing the submittal of the application and identifying the individual authorized to implement the bus replacement project.

(b) School Bus Retrofit

Air districts must ensure that project applications include the specific information needed to populate the bond accountability database (see Appendix J) and collect the following information:

For each bus that is to receive a diesel emission control retrofit device:

- Engine horsepower

Grant applications must include a resolution from the school district governing board (or a duly authorized official with authority to make financial decisions) authorizing the submittal of the application and identifying the individual authorized to implement the retrofit project.

(c) Application Tracking

Implementing agencies must have a system for tracking applications. At a minimum, the tracking system shall include the name and address of the bus owner, whether the application is in regard to a bus replacement or retrofit, and the model year of the bus to be replaced or retrofitted. The implementing agency shall also maintain a copy of each application and a file for each selected project. The tracking system must be retained and made available at the time of an audit.

2. How Awards are Made

Applicants will be notified by mail after awards are approved by the implementing agency. Staff at these agencies shall prepare funding agreements that set forth the terms, conditions, and reporting requirements for each grant.

The payment schedule shall be established in the funding agreement. No funds shall be released until the applicant and the implementing agency have signed the funding agreement. In general, payment will be made as purchase costs are incurred and documentation is provided to the implementing agency. For new buses, proof of new vehicle delivery and dismantling of the replacement vehicle must be provided before payment is made by the implementing agency. For retrofitted buses, a copy of a completed CHP form 343 – Safety Compliance Report/Terminal Report Update, OR a copy of a completed CHP form 343A – Vehicle/Equipment Inspection Report Motor Carrier Safety Operations must be provided before payment is made by the implementing agency.

Applicants can only be reimbursed for project costs incurred on or after the date of approval by the implementing agency. The implementing agency will not fund, nor be liable for any portion of, an applicant's cost of preparing and submitting an application.

If the implementing agency issues payment for equipment to vendors, then the implementing agency shall issue payment for equipment to vendors pursuant to the requirements of section 41200, et seq. of the California Education Code (California Proposition 98), to minimize the financial impacts to schools.

3. Reporting Requirements and Records Retention

Implementing agencies will be required to input program information into an on-line transportation bond accountability database that is being developed by the ARB to facilitate compliance with EO S-02-07. The database is expected to be operational in spring 2008.

(a) Reports Submitted to Implementing Agencies

All school districts must report to the appropriate implementing agency upon ordering and delivery of bus(es), and contracts let for, and completion of, any funded alternative fuel or electric infrastructure funded by State monies. In addition, upon ordering a new bus, a school district must obtain from the school bus distributor a purchase order and a copy of the ARB certification Executive Order for the engine of the bus in the purchase order. Then the school district must submit copies of the purchase order and Executive Order to the implementing agency. The implementing agency must review the purchase order and Executive Order to ensure that the new bus will meet the minimum replacement bus requirements (see chapter titled "Lower-Emission School Bus Replacement Program Requirements") and that the purchase order includes the liquidated damages language set forth in Appendix C: Minimum Contract Requirements. Any other requirements implemented by the implementing agency must be specified in the funding agreements with school districts.

All participating school districts and private transportation contractors must report to the implementing agency upon ordering, delivery, installation, and CHP inspection of diesel emission control retrofit devices. Any other requirements by the implementing agency will be specified in the funding agreements with successful applicants.

(b) Reports Submitted to the ARB

SB 88 requires the ARB to require recipient (also known as "implementing") agencies to submit semiannual progress reports and a final report to the ARB. The ARB must forward those reports to the DoF. Reports must be submitted (i.e., entered into the bond accountability database, printed, signed, and mailed) by the dates listed in Table V-1 and Appendix D. Reports must be signed and dated by the air district's Air Pollution Control Officer and Chief Financial Officer.

Reports must be mailed to:

Attn: Lower-Emission School Bus Program, Mail Stop 7B
Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

To reduce the reporting burden on implementing agencies, the bond accountability database is designed to collect data for both bond accountability and SB 88 reporting requirements. Information that must be reported to the ARB is set forth in Appendix J.

(c) Records Retention

Records must be retained by implementing agencies and applicants for the contract term plus two years. Lists of records that must be retained by implementing agencies and applicants are provided in Appendix E.

O. Liquidated Damages for Late Delivery of School Buses

The ARB will hold liable for liquidated damages the business entity responsible for a delay that results in the failure to deliver program-funded school buses to school districts by February 1, 2010 (for pre-1977 model year bus replacements) or April 1, 2011 (for 1977-1986 model year bus replacements). Specifically, the liquidated damages will be in the amount of $100 per day per bus for each day a bus is delivered after February 1, 2010 (for pre-1977 model year bus replacements) or April 1, 2011 (for 1977-1986 model year bus replacements). The purpose of charging liquidated damages is to ensure a level playing field for all business entities that stand to profit from the sale of program-funded school buses, to minimize any potential risks to school districts, and to forestall delays in achieving emission benefits. Implementing agencies must review school districts' purchase orders for new buses to ensure that the purchase orders include the liquidated damages clause set forth in Appendix C: Minimum Contract Requirements of these Guidelines.

For the air districts that self-implement the program, the liquidated damages will be administered through a withhold by the ARB of five percent of the total grant fund award to each air district until after April 1, 2011. Upon confirmation by each air district that all program-funded buses have been delivered to school districts by April 1, 2011, the ARB will immediately release the remaining five percent of their respective grant awards to each air district. For each bus delivered late, the air districts shall reduce the grant payment to either the school bus distributor or the school district (depending on the contract arrangements for the payment of bus purchase orders) by $100 per day per bus for each day a bus is delivered after the applicable deadline. The ARB will retain an amount equal to the calculated liquidated damages from the applicable air district's grant withhold. Upon confirmation of final bus delivery to the school districts, the ARB will then release the remaining grant award balance, if any, to the air district.

Any funds generated through the collection of liquidated damages will be used to augment program funding on a statewide basis.

P. Minimum Contract Requirements

All implementing agencies must enter into contracts with applicants that include minimum contract requirements. The summary provided below in Table V-2 is an overview of, not a substitute for, the complete description of minimum contract requirements provided in Appendix C. Each implementing agency shall draft contracts in consultation with the implementing agency's legal staff. Applicants must incorporate the minimum contract requirements, that are applicable to the specific project, in purchase order agreements with vendors.

Table V-2 Overview of Minimum Contract Requirements[(a)]	
Project Milestones Party Names and Dates Enforcement On-Site Inspections, Audits, and Records Retention Notices Contract Term Project Specifications Funding Caps Invoices Payment	Disposal of Replaced Buses Assumed Date(s) of Delivery New Bus Purchase Delivery Deadlines and Liquidated Damages Infrastructure Deadline Requirement for CHP Safety Inspection After Retrofit Ownership and Operation Maintenance Fuel Additives Non-Compliance Terms
(a) This table is a summary of, not a substitute for, the complete description of minimum contract requirements provided in Appendix C.	

The contract must be fully executed and the project milestones (e.g., delivery, installation, final inspection, and acceptance) shown in the contract must be met before Lower-Emission School Bus Program funds are provided to the vendor.

Q. Accountability and Reporting

As discussed at the beginning of this chapter, a number of elements, including State mandates, record-high funding, and lessons learned, necessitate more robust oversight of the Lower-Emission School Bus Program. This section covers commitment and expenditure of previous grant awards; commitment and expenditure of current State program funding; the project completion deadline; unexpended State program funding; and calculating, tracking, reporting, and expending earned interest.

1. Documentation of Expenditure of Previous Grant Awards

    (a) Retrofits

Air districts that have previously been awarded Lower-Emission School Bus Program retrofit funds must have submitted, or submit with the initial disbursement request document package, documentation of the status of all previous years' retrofit funds. This documentation must, at a minimum, include the following:

- Names and addresses of the applicants that received the funds
- Number of buses retrofitted
- Manufacturer and make of the retrofit device
- Expenditure for each retrofit
- Total expenditure
- Documentation that funds have been committed through fully executed contracts, i.e., copies of executed contracts

- Documentation that funds have been expended, e.g., copies of checks, remittance letters, receipts, etc. Invoices must be sent, and they must be accompanied by some form of proof of payment.

(b) Bus Replacement

Air districts that have previously been awarded Lower-Emission School Bus Program bus replacement funds must have submitted, or submit with the initial disbursement request document package, documentation of the status of all previous years' bus replacement funds. This documentation must, at a minimum, include the following:

- Names and addresses of the school districts that received the funds
- Number of buses replaced
- Model year, manufacturer, and fuel type of each new bus funded
- Expenditure for each new bus
- Location and type of infrastructure funded
- Expenditure for each infrastructure project/installation funded
- Total expenditure
- Documentation that funds have been committed through fully executed contracts, i.e., copies of executed contracts
- Documentation that funds have been expended, e.g., copies of checks, remittance letters, receipts, etc. Invoices must be sent, and they must be accompanied by some form of proof of payment.

2. Expenditures

A Lower-Emission School Bus Program grant award is not considered to be fully expended until all of the funds in the grant award have been paid out by the implementing agency by paying invoices associated with approved projects. The final deadline for full expenditure of Lower-Emission School Bus Program State program funds, including funds that are designated for the purchase of re-fueling infrastructure, is June 30, 2011. Any funds in the grant award that are not expended (paid out) by this date must be returned to the ARB. Any State program funding outstanding (i.e., has not been paid out) as of June 30, 2011 must be returned to the ARB within 60 days.

(a) Invoices

An itemized invoice for a project must be received by the implementing agency before payment may be made. A project invoice must include enough detail to ensure only eligible project costs are being paid for, yet clear and concise enough to be understandable. The air district or ARB shall review the itemized invoice and only pay for eligible expenses.

3. Earned Interest

The air district shall track and report to the ARB the amount of interest earned on State program funds held in air district accounts beginning immediately after receipt of State program funds from the ARB.

The interest income shall be used to fund projects or administrative expenses that comply with these Lower-Emission School Bus Program Guidelines.

(a) Calculation of Earned Interest

Air districts must maintain accounting records (e.g., general ledger) that track interest earned on and expenditures of Lower-Emission School Bus Program State program funds.

- The ARB strongly encourages implementing agencies to maintain their Lower-Emission School Bus Program State program funds in a segregated account.

- If an air district maintains its Lower-Emission School Bus Program State program funds in a non-segregated account, then the air district shall maintain accounting records that first separate Lower-Emission School Bus Program State program funds from other funds administered by the air district, and then further separate interest earned on Lower-Emission School Bus Program State program funds and the related expenditures of that earned interest.

    - The calculation of interest shall be based on an average daily balance or some other reasonable and demonstrable method of allocating the proceeds from the fund back into the program.
    - Each district's methodology for calculating Lower-Emission School Bus Program State program fund interest shall be consistent with how it calculates earned interest for its other fiscal programs.

- Earned interest must be tracked such that it is separately identifiable from other State program funds.

(b) Expenditures for Program Implementation

A district may use up to two percent of earned interest for program administrative costs. This applies whether or not a district segregates its Lower-Emission School Bus Program funds into project and program administration accounts.

(c) Documentation Retention

Documentation of earned interest generation and expenditure shall be retained for a minimum of the contract term plus two years.

(d) Expenditure Deadline

Because all Lower-Emission School Bus Program State program funds must be fully expended by June 30, 2011, interest earned on those funds must also be fully expended by this deadline. Earned interest that is not fully expended by June 30, 2011, must be returned to the ARB within 60 days from the deadline.

(e) Reporting Earned Interest Projects to ARB

Implementing agencies must report to the ARB on the amount of earned interest accumulated on Lower-Emission School Bus Program State program funds. Implementing agencies must also report to the ARB on projects and administrative costs funded with earned interest.

R. ARB Audit of Air Districts

The California Air Resources Board is responsible for overseeing State-funded emission reduction incentive programs such as the Lower-Emission School Bus Program and the Carl Moyer Program. As part of such oversight, ARB has the responsibility and authority to conduct audits (Health and Safety Code §44291 and §39500). ARB's audits of air districts' Lower-Emission School Bus Programs are typically performed in conjunction with audits of districts' Carl Moyer Programs. This maximizes audit efficiency and minimizes the burden on the districts. Such audits are designed to ensure that district incentive programs achieve expected emission reductions and are implemented in a manner consistent with program guidelines and State law. Besides identifying program deficiencies, audits are also designed to provide ARB with a mechanism for identifying the strengths of district programs. ARB's specific audit procedures are described in more detail in the Carl Moyer and School Bus Program Auditing Policies and Procedures Manual.

Oversight and auditing of expenditures of AB 923 funds, including AB 923 funds spent pursuant to the Lower-Emission School Bus Program Guidelines, will be conducted through the process described in the 2008 Carl Moyer Program Guidelines.

1. ARB's Audit Schedule

ARB's audit schedule for the Lower-Emission School Bus Program is largely driven by the audit schedule for the larger Carl Moyer Program, although risk factors for the Lower-Emission School Bus Program are considered when prioritizing districts to audit. It is appropriate to audit both programs under the same schedule for several reasons. First, there is significant overlap in the districts that implement the Carl Moyer and Lower-Emission School Bus Programs; the districts that have historically implemented the Lower-Emission School Bus Program are a subset of the districts that have implemented the Carl Moyer Program. Also, the allocation of State funds for both programs tends to be greatest for the large districts. Accordingly, ARB shall audit a sufficient number of districts each year – commensurate with approximately 10 percent of Carl Moyer Program funds – to ensure proper program implementation. The frequency of district audits is as follows:

- Large districts will be audited at least once every four years.
- Medium districts will be audited at least once every six years.
- Small districts will be audited at least once every eight years.

To ensure objectivity and the efficient use of resources, ARB shall use a risk-based approach to select specific districts for audit during a given year and to select specific

district projects to audit. Consistent with this approach, districts that demonstrate good performance when audited will likely be audited less frequently in the future than similarly-funded districts with poorer audit results.

2. ARB's Responsibilities During an Audit

Audits shall be conducted in a manner that reflects the public responsibility and accountability entrusted to ARB. ARB shall maintain open channels of communication with the district under audit. ARB's audit procedures contain a number of provisions to enable open communications. Such provisions include fully explaining the audit's scope and procedure at the beginning of the process, discussing preferred channels of communication with the district, informing the district of potential issues as they unfold, affording numerous opportunities for district input throughout the audit, thoroughly discussing any findings and recommendations with the district during the exit interview, and allowing the district an opportunity to formally respond to the audit report.

To ensure objectivity and predictability, ARB shall base its findings and recommendations on materials such as State law, ARB's Program Guidelines and Advisories, Program Grant Award and Authorizations, e-mail communications between ARB and the district, a district's Policies and Procedures Manual, and a district's local requirements.

All audit reports, district responses, and related documents shall be readily available to the public.

ARB shall conduct sufficient follow-up activities, including assisting districts and conducting follow-up reviews, to ensure that any identified deficiencies are promptly and effectively rectified.

3. Air Districts' Responsibilities During an Audit

Districts shall ensure that program files and other requested information are readily available to audit staff. In addition, district management shall, at a minimum, participate in the entrance and exit interviews and shall ensure that district staff is cooperative with audit staff. District staff shall communicate fully with audit staff and with district management throughout the course of an audit. Districts shall make every effort, including requesting assistance from ARB if necessary, to ensure that identified deficiencies are promptly and effectively rectified. Districts shall report on their progress at specified intervals.

S. Audits Conducted by the DoF

The Lower-Emission School Bus Program is also subject to audit by the DoF as part of the three-part accountability structure set forth in EO S-02-07, which increases transparency in the bond proceeds expenditure process. For more information, visit the Strategic Growth Plan Bond Accountability Web site at http://www.bondaccountability.ca.gov/.

DoF may audit at both the State and local air district levels.

Appendix A

Glossary of Administrative Terminology

Appendix A Glossary of Administrative Terminology

This appendix provides definitions of terms that are used throughout these Guidelines.

Administrative agency/Administering agency. The California Air Resources Board.

CAPCOA: The California Air Pollution Control Officers Association.

Commitment of Funds. Funds are considered to be committed to a project when the air district officially selects an eligible project for funding through any of the following actions:

- The air district's governing board approves a project for funding through a resolution, minute order, letter, or other written instrument, or
- The district's Air Pollution Control Officer or other governing board-authorized representative sends the successful applicant a project offer letter, or
- The contract between the implementing agency and the school bus owner is fully executed.

Contract. A contract, grant, or other legally binding and enforceable agreement used by an air district, the ARB, or an applicant to commit and expend funds for a project funded through the Lower-Emission School Bus Program.

Dismantle. To punch, crush, stamp, hammer, shred, or otherwise render permanently and irreversibly incapable of functioning as originally intended, any vehicle or vehicle part.

Equipment. Equipment includes, but may not be limited to, buses, associated refueling infrastructure for alternative-fueled buses, and diesel emission control retrofit devices.

Expend. An implementing agency expends funds from a grant award by paying invoices associated with approved projects.

Fully executed contract. A fully executed contract is one that has been signed and dated by all parties to the contract.

Fully executed Grant Award and Authorization Form. A fully executed Grant Award and Authorization Form is one that has been signed and dated by all parties to the Grant Award and Authorization Form.

Fully expend. A Lower-Emission School Bus Program grant award is considered to be fully expended when all of the funds in the grant award have been paid out by the implementing agency by paying invoices associated with approved projects.

Grant Award and Authorization Form. A Grant Award and Authorization Form is a legally binding and enforceable agreement initiated by the ARB to consign funds for a project funded through the Lower-Emission School Bus Program. This document is sometimes referred to as a grant award agreement, grant agreement, or grant award.

Implementing agencies. Local air districts, and in some instances, the California Air Resources Board.

Order. To obtain a purchase order.

Project. "Project" includes equipment purchase, equipment installation, data logging of buses that are candidates to receive diesel emission control retrofit devices, and associated maintenance of diesel emission control retrofit devices.

Proposition 1B. Proposition 1B, approved by California voters on November 7, 2006, enacts the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, which authorizes $200 million for replacing and retrofitting school buses throughout California.

Spend. Expend.

State program funds/State program funding. Funds that were appropriated to the ARB, through the 2007 Budget Act, for the administration of the Lower-Emission School Bus Program. Source of funding: Proposition 1B.

Appendix B

Air District Funding Allocations

Appendix B Air District Funding Allocations

This appendix describes the amount of funding that is available, explains how bus populations were estimated, and provides the funding allocations.

A. Amount of Funds

Proposition 1B provides $200 million for school bus retrofit and replacement to reduce air pollution and to reduce children's exposure to diesel exhaust. From these funds, about $7 million were set aside for bond financing costs, and the State Legislature has appropriated $193 million in the 2007-2008 fiscal year (FY) budget to the California Air Resources Board (ARB or Board) for the Lower-Emission School Bus Program. SB 88 allows the ARB to use up to five percent for program administration; however, the ARB will use less than one percent – about $1,620,000 – for program administration. This leaves $191,380,000 available to be spent in local air districts (see Table B 1).

B. Funding Allocation

Funding allocations are provided below in Table B-1. These allocations reflect the allocation provisions set forth in SB 88, and are also based on estimates of school bus populations that are described in Section 1 below. When determining the allocations, staff assumed a cost of $140,000 to replace a pre-1977 MY bus.

1. Estimates of Bus Populations

The populations of buses eligible for replacement under the Lower-Emission School Bus Program were estimated based on information in the 2005 California Highway Patrol (CHP) school bus safety certification database supplemented by information from surveys collected from public school districts operating some 1986 and older MY school buses. When trying to determine replacement eligibility, staff chose school buses owned by public schools and joint powers authorities (JPA), with greater than 14,000 pounds gross vehicle weight rating (GVWR), that were still in the fleet, and having recent CHP safety certifications, if these data were available. Because not all buses had GVWR information in the database, staff also selected for seating capacity, assuming that a bus seating greater than 19 had a greater than 14,000 pounds GVWR. In the 1977-1986 MY bus population, staff included buses not surveyed, thereby potentially including ineligible buses.

With current funding, the ARB projects that over 1,100 new buses will be purchased to replace pre-1987 MY public school buses – all eligible remaining pre-1977 MY buses and about 40 percent of eligible 1977-1986 MY buses. ARB staff estimates that fewer than 100 pre-1977 public school buses are still in operation. Appendix F contains a list of pre-1977 MY public school buses that are eligible for replacement. ARB staff estimates that about 2,700 1977 through 1986 MY buses are still operating in California by public school districts. The funding allocation in Table B-1 was developed using the aforementioned bus population estimates and conform to the allocation requirements set forth in SB 88.

Table B-1 Lower-Emission School Bus Program Funding Allocations				
Larger Air Districts	Population as of January 2008	Estimated Populations as of October 2007		
	Pre-1977 Population	**1977-1986 Population**	**Percent of 1977-1986 Population**	**Total Allocation (Incl. Admin)**
Bay Area	4	118	4.34%	$8,400,000
Monterey	8	90	3.31%	$7,100,000
Sacramento	1	134	4.93%	$9,100,000
San Diego	2	80	2.94%	$5,600,000
San Joaquin Valley	10	567	20.85%	$39,150,000
South Coast	9	1034	38.03%	$70,100,000
Ventura	4	66	2.43%	$5,000,000
Subtotal	38	2089	77%	$144,450,000
Small and Medium Air Districts (includes remaining 28 air districts)				
	Pre-1977 Population	**1977-1986 Population**	**Percent of 1977-1986 population**	**Total Allocation (Incl. Admin)**
Amador	0	1	0.04%	$140,000
Antelope	0	18	0.66%	$1,200,000
Butte	4	31	1.14%	$2,600,000
Calaveras	0	16	0.59%	$1,100,000
Colusa	0	8	0.29%	$500,000
El Dorado	0	32	1.18%	$2,100,000
Feather River	3	26	0.96%	$2,200,000
Glenn	0	7	0.26%	$470,000
Great Basin	0	11	0.40%	$700,000
Imperial	3	33	1.21%	$2,600,000
Kern	4	13	0.48%	$1,400,000
Lake	0	29	1.07%	$1,900,000
Lassen	0	9	0.33%	$600,000
Mariposa	0	18	0.66%	$1,200,000
Mendocino	3	23	0.85%	$1,950,000
Modoc	0	7	0.26%	$470,000
Mojave	3	44	1.62%	$3,300,000
North Coast	1	44	1.62%	$3,100,000
Northern Sierra	5	23	0.85%	$2,200,000
Northern Sonoma	0	9	0.33%	$600,000
Placer	2	36	1.32%	$2,700,000
San Luis Obispo	0	29	1.07%	$1,900,000
Santa Barbara	1	22	0.81%	$1,600,000
Shasta	3	54	1.99%	$4,000,000
Siskiyou	1	21	0.77%	$1,500,000
Tehama	0	19	0.70%	$1,300,000
Tuolumne	3	19	0.70%	$1,700,000
Yolo-Solano	0	28	1.03%	$1,900,000
Subtotal	36	630	23%	$46,930,000
TOTAL STATEWIDE	74	2719	100%	$191,380,000

Appendix C

Minimum Contract Requirements

Appendix C Minimum Contract Requirements

All implementing agencies participating in the Lower-Emission School Bus Program must incorporate minimum contract requirements in contracts entered into with applicants that have been selected to receive funds under the Lower-Emission School Bus Program. Each implementing agency shall draft contracts in consultation with the implementing agency's legal staff. Applicants must incorporate the minimum contract requirements, that are applicable to the specific project, in purchase order agreements with vendors.

This appendix contains the complete description of the minimum contract requirements that are summarized in Table V-2: Overview of Minimum Contract Requirements.

A. Project Milestones

All contracts shall include project milestones.

B. Party Names and Dates

All contracts shall state the name of the implementing agency and the applicant as parties to the contract. Contracts shall include signature blocks with an area for the dates that the contract is signed.

C. Enforcement

All contracts shall also state that, in addition to enforcement by the air district, the ARB, as an intended third party beneficiary, reserves the right to audit and enforce the terms of the contract at any time during the contract term plus two years.

D. On-Site Inspections, Audits, and Records Retention

All contracts shall include language that allows the air district, the ARB, the California DoF, or their designated representative the right to review and to copy any records and supporting documentation pertaining to the performance of the contract – this includes programmatic and fiscal records and documentation. The applicant shall agree to maintain such records for possible audit for a minimum of the contract term plus two years. The applicant shall agree to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, the applicant agrees to include a similar right of the State to audit records and interview staff in any subcontract related to performance of the contract.

All contracts shall include language that allows the air district, ARB, or their designated representative to inspect the project equipment during the entire contract term plus two years and as long as it is still in use after the contract term.

Contracts must require applicants to maintain and retain the project records that are listed in these Guidelines in Appendix E: Records Retention. Records must be retained for the contract term plus two years.

E. Notices

All contracts shall include contact information for both parties to the contract, and how to send and receive notices.

F. Contract Term

All contracts shall specify the term of the contract. The contract term shall include two time frames – "project completion" and "project implementation" – to ensure that the air district and the ARB can fully enforce the contract during the life of the Lower-Emission School Bus Program-funded project.

1. Project Completion

Project completion is the time frame starting with the date of execution of the contract to when the implementing agency confirms that the project has become operational. This includes the time period when equipment is ordered, delivered, and installed. The contract shall include a specified time frame in which project completion shall occur, so that the funds are fully expended by June 30, 2011.

The contract shall also require that no work may begin on the project until the contract is fully executed.

2. Project Implementation

The project implementation time frame begins on the date that an applicant makes the final invoice payment on equipment funded with Lower-Emission School Bus Program State program funds. The project implementation time frame is the second part of the contract term, and must equal no less than five years – the minimum amount of time an applicant must own and operate a bus that is purchased or retrofitted with Lower-Emission School Bus Program funds. The contract shall specify that the owner is required to operate and maintain their Lower-Emission School Bus Program-funded project according to the terms of the contract for the full project implementation period.

G. Project Specifications

Contracts must also contain a statement that the project complies with the Lower-Emission School Bus Program Guidelines and criteria and shall meet all program requirements for the full contract term.

H. Funding Caps

The contract must comply with funding caps for the specific project category as identified in these Guidelines.

I. Invoices

Applicants must submit itemized invoices to the implementing agency.

J. Payment

Before a Lower-Emission School Bus Program payment may be made to a vendor or an applicant, the project contract must be executed, and an eligible itemized invoice must be received by the applicant or implementing agency.

K. Disposal of Replaced Buses

All new bus contract agreements between implementing agencies and school districts must state that the older bus that is replaced shall be dismantled in accordance with the definition of "dismantle" set forth in these Guidelines in Appendix A: Glossary of Administrative Terminology. School districts must ensure that the old school bus is dismantled within 60 days of the receipt of the new, replacement bus. The school district shall obtain and retain the following documentation for the contract term plus two years:

- A copy of the Department of Motor Vehicles Dismantlers Notice of Acquisition/Report of Vehicle to be Dismantled (REG 42); and

- A letter signed and dated by a representative of the entity that dismantled the bus. The letter must state that the vehicle and engine were dismantled in accordance with the definition of "dismantle" set forth in these Guidelines in Appendix A: Glossary of Administrative Terminology. In addition, the letter must include the following information for each dismantled bus:

    - The Vehicle Identification Number, the method used to dismantle the non-engine portion of the bus, and the date the non-engine portion of the bus was dismantled; and
    - The engine serial number, the method used to dismantle the engine, and the date the engine was dismantled.

All new bus contract agreements between implementing agencies and school districts must state that the school districts must send copies of the aforementioned documentation to the implementing agency.

L. Assumed Date(s) of Delivery

All new bus contract agreements between implementing agencies and applicants must state the assumed date(s) of delivery for the new bus(es).

M New Bus Purchase Delivery Deadlines and Liquidated Damages

For the purchase of new school buses to replace buses of any eligible model year, the following clauses must be included in the contract language in which the implementing agency awards funds to school districts, and in the terms and conditions of the purchase order agreement between school districts and school bus distributors:

Liquidated Damages

Time is of the essence in these contracts for the purchase of new school buses to replace older, higher-polluting buses. Failure to timely deliver the new school buses will result in harm to the implementing agency, school districts, schoolchildren, and air quality in the affected school and air districts. Further, every day in which delivery of a new school bus has been delayed may result in additional costs to the implementing agency and school district to rent or lease an equivalent bus or otherwise mitigate the damages from the delay; such costs are definite but unquantifiable at the time of execution of the contract. Therefore, the parties acknowledge and agree to pay liquidated damages for failure to timely deliver the new school buses, as specified below:

Contracts/grant agreements between implementing agency and school districts

For every day after [insert applicable deadline: April 1, 2011 or February 1, 2010] in which a bus has not been delivered as specified in the contract, the school district shall be liable to the implementing agency for liquidated damages in the amount of $100 per day per bus purchased with funds from the Lower-Emission School Bus Program.

Contracts/purchase agreements between school districts and school bus distributors/vendors

For every day after [insert applicable deadline: April 1, 2011 or February 1, 2010] in which a bus has not been delivered as specified in the contract, the school bus distributor/vendor shall be liable to the school district for liquidated damages in the amount of $100 per day per bus purchased with funds from the Lower-Emission School Bus Program.

N. Infrastructure Deadline

Lower-Emission School Bus Program State program funds that are designated for the purchase of re-fueling infrastructure must be fully expended by the same deadline by which the funds to purchase the accompanying new bus(es) must be fully expended.

O. Requirement for CHP Safety Inspection After Retrofit

All retrofit contract agreements between implementing agencies and applicants must include the requirement that each retrofitted bus undergoes a CHP safety certification inspection [per Title 13, CCR section 1272(c)] after the installation of an emission control device and prior to the bus's return to service.

All retrofit contract agreements between implementing agencies and applicants must include the requirement that, after the aforementioned CHP safety certification inspection is done, the applicant must obtain a copy of written documentation from CHP personnel that the retrofitted bus is still structurally acceptable to safely transport students. This documentation shall consist of a copy of a Safety Compliance Report/Terminal Record Update (CHP 343), or a copy of a Vehicle/Equipment Inspection Report Motor Carrier Safety Operations form (CHP 343A).

P. Ownership and Operation

All new bus contract agreements between implementing agencies and applicants must include the requirement that the applicant own and operate the new bus for five years or more.

All retrofit contract agreements between implementing agencies and applicants must include the requirement that the applicant own and operate the retrofitted bus for five years or more.

Q. Maintenance

All retrofit contract agreements between implementing agencies and applicants must include the requirement that the applicant operates and maintains the installed retrofit devices according to the manufacturer's warranty specifications.

All retrofit contract agreements between implementing agencies and applicants must include the requirement that the applicant has diesel particulate filters cleaned periodically (also known as "periodic maintenance" and "baking and de-ashing") 1) throughout their estimated 11-year life, or 2) if a bus is kept for less than 11 years, as long as an applicant owns and operates a retrofitted bus.

All bus replacement contract agreements between implementing agencies and applicants must include the requirement that the applicant operates and maintains the new school bus according to the manufacturer's specifications.

R. Fuel Additives

All retrofit contract agreements between implementing agencies and applicants must include the requirement that fuel additives are not allowed to be used unless specifically identified as allowable in the retrofit device verification Executive Order.

All bus replacement contract agreements between implementing agencies and applicants must include the requirement that fuel additives are not allowed to be used unless specifically identified as allowable in the engine certification executive order.

S. Non-Compliance Terms

Implementing agencies shall include terms to cancel contracts or withhold payment for non-compliance with or not meeting the obligations of the contract, and may include a term that cancels the contract if it is not executed by the owner in a timely manner.

Appendix D

Lower-Emission School Bus Program
Expanded Timetable

Appendix D Lower-Emission School Bus Program Expanded Timetable

This appendix is the complete Lower-Emission School Bus Program Timetable. It is an expanded version of the abridged timetable that is presented in Table V-1 of these Guidelines. The dates shown are the final dates for execution of the designated activities conducted with State program funding.

Table D-1
Expanded Lower-Emission School Bus Program Timetable

Dates	Milestones(a)
March 27-28, 2008	Board approves air district allocations and Guidelines
April 30, 2008	**Funds made available to air districts by ARB** • Grant Award and Authorization Forms mailed by ARB
Beginning May 2008 and ongoing	**Initial disbursements to air districts based on readiness** • Air Districts' Policy and Procedures Manuals must be approved by the ARB • Air Districts must submit fully executed Grant Award and Authorization Forms to ARB • Initial disbursements from ARB will include: o 100 percent of the allocation designated for replacing pre-1977 MY buses, if applicable; and o 10 percent of the remainder of the allocation; and o 50 percent of administrative funds **Additional disbursements from ARB to air districts based on demonstrated need (i.e., 50% of funds from all previous disbursements under contract)** • Up to 65% of its total allocation through June 30, 2009 **ARB/CAPCOA begins direct implementation of Program, where applicable**
June 30, 2008	**100% of funds encumbered by ARB through Grant Award and Authorization Forms**

Table D-1 Expanded Lower-Emission School Bus Program Timetable	
February 1, 2009	**First semiannual report, demonstrating conformance with performance milestone(s) due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB) • Districts with pre-1977 buses: 100% of funding for replacing pre-1977 buses must be under fully executed contracts, and buses must be ordered • Districts without pre-1977 buses: o Based on commitment in Policies and Procedures, 10% of funds committed to retrofits must be under fully executed contracts o Based on commitment in Policies and Procedures, 10% of funds committed to replacing 1977-1986 buses must be under fully executed contracts
March 1, 2009	**Based upon February 1, 2009 demonstration of performance, ARB determines if direct implementation (by ARB/CAPCOA) of additional local programs is necessary**
June 30, 2009 (deadline for ARB to encumber all funds)	**Local funds re-encumbered by ARB, if necessary**
August 1, 2009	**Second semiannual report, demonstrating conformance with performance milestone(s)** due (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB) • 50% of an air district's total allocation must be under fully executed contracts

Table D-1 Expanded Lower-Emission School Bus Program Timetable	
February 1, 2010	**Third semiannual report, demonstrating conformance with performance milestone(s)** due (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB) • 100% of pre-1977 bus replacements paid for, delivered and in operation • 100% of 1977-1986 bus replacement funds under fully executed contracts and buses ordered • 50% of retrofit commitment under fully executed contracts • 10% of retrofit funds spent and retrofitted buses in operation
June 30, 2010	**Retrofit funding may no longer be available for school buses due to proposed In-Use On-Road Heavy-Duty Diesel Vehicles Regulation**
August 1, 2010	**Fourth semiannual report, demonstrating conformance with performance milestone(s)** due (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB) • 100% of total allocation under fully executed contracts
February 1, 2011	**Fifth semiannual report, demonstrating conformance with performance milestone(s)** due (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB) • 25% of funds committed to replacing 1977-1986 buses paid out • 50% of funds committed to retrofits paid out and projects in operation
April 1, 2011	**All new buses delivered and infrastructure completed**
June 30, 2011	• Deadline for full expenditure of Proposition 1B funds • 100% of funds paid out; all projects/equipment in operation • Funds outstanding as of this date must be returned to ARB within 60 days

Table D-1 Expanded Lower-Emission School Bus Program Timetable	
August 1, 2011	**Final report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)
(a) This table contains a brief overview of milestones. Details regarding the criteria air districts must follow to meet these milestones are provided throughout the chapter titled "Administrative Responsibilities of Air Districts and the Air Resources Board in Implementing the Lower-Emission School Bus Program."	

Appendix E

Records Retention

Appendix E Records Retention

This appendix lists the documents and records that implementing agencies and applicants must retain in their files.

A. IMPLEMENTING AGENCIES

Implementing agencies shall retain files containing:

- The resolution from the local air district governing board (or other documentation signed by a duly authorized official) that authorizes the air district to accept State program funds
- Policies and Procedures Manual
- Grant Disbursement Request forms
- Remediation plans
- Documentation of earned interest generation and expenditure
- Documentation of implementation of the process that is used to select projects and award grants
- Program opportunity notices
- System used to track applications

1. School Bus Replacements

Implementing agencies shall retain files for each funded bus replacement project containing:

- Application
- Resolution from the school district governing board (or a duly authorized official with authority to make financial decisions) authorizing the submittal of the application and identifying the individual authorized to implement the bus replacement project.
- Executed contracts, including those entered into with the ARB and with applicants
- Copy of the purchase order for the new replacement bus
- Copy of the ARB certification executive order for the engine of the new replacement bus in the purchase order
- Invoices
- Proof of payment
- Copy of the Inspection Approval Certificate (CHP form 292) for the replaced bus
- Copy of the registration for the replaced bus
- To document the gross vehicle weight rating (GVWR) for any bus that is to be replaced, a photograph of the bus's data tag must be taken and retained in the files. The photograph must be legible and preferably in electronic format.
- Copy of the registration for the new replacement bus
- Documentation of the disposal of the replaced bus. This documentation must include:

- A copy of the Department of Motor Vehicles Dismantlers Notice of Acquisition/Report of Vehicle to be Dismantled (REG 42); and

- A letter signed and dated by a representative of the entity that dismantled the bus. The letter must state that the vehicle and engine were dismantled in accordance with the definition of "dismantle" set forth in these Guidelines in Appendix A: Glossary of Administrative Terminology. In addition, the letter must include the following information for each dismantled bus:

    - The Vehicle Identification Number, the method used to dismantle the non-engine portion of the bus, and the date the non-engine portion of the bus was dismantled; and
    - The engine serial number, the method used to dismantle the engine, and the date the engine was dismantled.

These files shall be retained for the contract term plus two years.

2. School Bus Retrofits

Implementing agencies shall retain files for each bus that is retrofit with State program funds. The files shall contain:

- Application
- Resolution from the school district governing board (or other documentation signed by a duly authorized official) authorizing the submittal of the application and identifying the individual authorized to implement the retrofit project.
- Executed contracts, including those entered into with the ARB and with applicants
- Invoice(s)
- Proof of payment
- A copy of the Safety Compliance Report/Terminal Record Update (CHP 343) or a copy of the Vehicle/Equipment Inspection Report Motor Carrier Safety Operations form (CHP 343A).
- Copy of the ARB retrofit device verification executive order for the device that was funded.
- Documentation in the form of an invoice or purchase order that states date of maintenance, description of service performed, and cost of service.

These files shall be retained for the contract term plus two years.

B. APPLICANTS

Applicants shall retain files containing correspondence with the implementing agency.

1. School Bus Replacements

Applicants shall retain files for each funded bus replacement project containing:

- Application
- Resolution from the school district governing board (or a duly authorized official with authority to make financial decisions) authorizing the submittal of the application and identifying the individual authorized to implement the bus replacement project.
- Vendor quotes
- Executed contracts
- Copy of the purchase order for the new replacement bus
- Copy of the ARB certification executive order for the engine of the new replacement bus in the purchase order
- Invoices
- Proof of payment
- Copy of the Inspection Approval Certificate (CHP form 292) for the replaced bus
- Copy of the registration for the replaced bus
- To document the GVWR for any bus that is to be replaced, a photograph of the bus's data tag must be taken and retained in the files. The photograph must be legible and preferably in electronic format.
- Copy of the registration for the new replacement bus
- Documentation of the disposal of the replaced bus. This documentation must include:

    - A copy of the Department of Motor Vehicles Dismantlers Notice of Acquisition/Report of Vehicle to be Dismantled (REG 42); and

    - A letter signed and dated by a representative of the entity that dismantled the bus. The letter must state that the vehicle and engine were dismantled in accordance with the definition of "dismantle" set forth in these Guidelines in Appendix A: Glossary of Administrative Terminology." In addition, the letter must include the following information for each dismantled bus:

        - The Vehicle Identification Number, the method used to dismantle the non-engine portion of the bus, and the date the non-engine portion of the bus was dismantled; and
        - The engine serial number, the method used to dismantle the engine, and the date the engine was dismantled.

These files shall be retained for the contract term plus two years.

2. School Bus Retrofits

Applicants shall retain files for each school bus that is retrofit with State program funds. The files shall contain:

- Application
- Resolution from the school district governing board (or other documentation signed by a duly authorized official) authorizing the submittal of the application and identifying the individual authorized to implement the retrofit project.
- Vendor quotes
- Executed contracts
- Invoice(s)
- Proof of payment
- A copy of the Safety Compliance Report/Terminal Record Update (CHP 343) or a copy of the Vehicle/Equipment Inspection Report Motor Carrier Safety Operations form (CHP 343A).
- Copy of the ARB retrofit device verification executive order for the device that was funded.
- Maintenance records
- Documentation in the form of an invoice or purchase order that states date of maintenance, description of service performed, and cost of service

These files shall be retained for the contract term plus two years.

Appendix F

List of Pre-1977 Model Year Public School Buses Still in Operation in California

Appendix F List of Pre-1977 Model Year Public School Buses Still in Operation in California

Table F-1
List of Pre-1977 Model Year Public School Buses Still in Operation in California as of January 2008

Air District	School District	Mfg date
BAY AREA AQMD	CAMPBELL UNION HIGH SCHOOL DISTRICT	1/1/1976
BAY AREA AQMD	CAMPBELL UNION HIGH SCHOOL DISTRICT	1/1/1976
BAY AREA AQMD	JEFFERSON UNION HIGH SCHOOL DISTRICT	1/1/1976
BAY AREA AQMD	JEFFERSON UNION HIGH SCHOOL DISTRICT	1/1/1976
BUTTE COUNTY AQMD	OROVILLE UNION HIGH SCHOOL DISTRICT	7/1/1976
BUTTE COUNTY AQMD	PARADISE UNIFIED SCHOOL DISTRICT	7/1/1973
BUTTE COUNTY AQMD	PARADISE UNIFIED SCHOOL DISTRICT	7/1/1974
BUTTE COUNTY AQMD	PARADISE UNIFIED SCHOOL DISTRICT	4/1/1975
FEATHER RIVER AQMD	MARYSVILLE JOINT UNIFIED SCHOOL DISTRICT	4/1/1976
FEATHER RIVER AQMD	MARYSVILLE JOINT UNIFIED SCHOOL DISTRICT	7/1/1976
FEATHER RIVER AQMD	SUTTER UNION HIGH SCHOOL DISTRICT	1/1/1976
IMPERIAL COUNTY APCD	BRAWLEY ELEMENTARY SCHOOL DISTRICT	9/1/1973
IMPERIAL COUNTY APCD	BRAWLEY ELEMENTARY SCHOOL DISTRICT	10/1/1973
IMPERIAL COUNTY APCD	BRAWLEY UNION HIGH SCHOOL	11/11/1974
KERN COUNTY APCD	SIERRA SANDS UNIFIED SCHOOL DISTRICT	1/1/1974
KERN COUNTY APCD	SIERRA SANDS UNIFIED SCHOOL DISTRICT	1/1/1974
KERN COUNTY APCD	SOUTHERN KERN UNIFIED SCHOOL DISTRICT	1/1/1974
KERN COUNTY APCD	SOUTHERN KERN UNIFIED SCHOOL DISTRICT	7/1/1975
MENDOCINO COUNTY AQMD	LAYTONVILLE UNIFIED SCHOOL DISTRICT	1/1/1976
MENDOCINO COUNTY AQMD	UKIAH UNIFIED SCHOOL DISTRICT	1/1/1974
MENDOCINO COUNTY AQMD	WILLITS UNIFIED SCHOOL DISTRICT	1/1/1975
MOJAVE DESERT AQMD	NEEDLES UNIFIED SCHOOL DISTRICT	1/1/1974
MOJAVE DESERT AQMD	NEEDLES UNIFIED SCHOOL DISTRICT	9/1/1975
MOJAVE DESERT AQMD	NEEDLES UNIFIED SCHOOL DISTRICT	11/1/1975
MONTEREY BAY UNIFIED APCD	MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT	1/1/1973
MONTEREY BAY UNIFIED APCD	MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT	1/1/1975

Table F-1
List of Pre-1977 Model Year Public School Buses Still in Operation in California as of January 2008

Air District	School District	Mfg date
MONTEREY BAY UNIFIED APCD	NO MONTEREY COUNTY UNIFIED SCHOOL DISTRICT	1/1/1976
MONTEREY BAY UNIFIED APCD	NO MONTEREY COUNTY UNIFIED SCHOOL DISTRICT	1/1/1976
MONTEREY BAY UNIFIED APCD	NO MONTEREY COUNTY UNIFIED SCHOOL DISTRICT	1/1/1976
MONTEREY BAY UNIFIED APCD	SALINAS UNION HIGH SCHOOL	1/1/1973
MONTEREY BAY UNIFIED APCD	SALINAS UNION HIGH SCHOOL	1/1/1973
MONTEREY BAY UNIFIED APCD	SOLEDAD UNIFIED SCHOOL DISTRICT	1/1/1974
NORTH COAST UNIFIED AQMD	FERNDALE UNION HIGH SCHOOL DISTRICT	1/1/1975
NORTHERN SIERRA AQMD	PLUMAS UNIFIED SCHOOL DISTRICT	1/1/1976
NORTHERN SIERRA AQMD	PLUMAS UNIFIED SCHOOL DISTRICT	1/1/1976
NORTHERN SIERRA AQMD	PLUMAS UNIFIED SCHOOL DISTRICT	1/1/1976
NORTHERN SIERRA AQMD	PLUMAS UNIFIED SCHOOL DISTRICT	1/1/1976
NORTHERN SIERRA AQMD	PLUMAS UNIFIED SCHOOL DISTRICT	1/1/1976
PLACER COUNTY APCD	EUREKA UNION SCHOOL DISTRICT	2/22/1975
PLACER COUNTY APCD	WESTERN PLACER UNIFIED SCHOOL DISTRICT	3/15/1974
SACRAMENTO METROPOLITAN AQMD	GALT JOINT UNION SCHOOL DISTRICT	8/19/1976
SAN DIEGO COUNTY APCD	DEHESA SCHOOL DISTRICT	1/1/1975
SAN DIEGO COUNTY APCD	SANTEE SCHOOL DISTRICT	12/1/1974
SAN JOAQUIN VALLEY UNIFIED APCD	CENTRAL UNIFIED SCHOOL DISTRICT	1/1/1973
SAN JOAQUIN VALLEY UNIFIED APCD	CENTRAL UNIFIED SCHOOL DISTRICT	1/1/1975
SAN JOAQUIN VALLEY UNIFIED APCD	EXETER UNION HIGH SCHOOL DISTRICT	5/1/1975
SAN JOAQUIN VALLEY UNIFIED APCD	FRESNO UNIFIED SCHOOL DISTRICT	1/1/1976
SAN JOAQUIN VALLEY UNIFIED APCD	FRESNO UNIFIED SCHOOL DISTRICT	1/1/1976

Table F-1
List of Pre-1977 Model Year Public School Buses Still in Operation in California as of January 2008

Air District	School District	Mfg date
SAN JOAQUIN VALLEY UNIFIED APCD	HICKMAN COMMUNITY CHARTER DISTRICT	1/1/1976
SAN JOAQUIN VALLEY UNIFIED APCD	KINGS CANYON UNIFIED SCHOOL DISTRICT	1/1/1976
SAN JOAQUIN VALLEY UNIFIED APCD	KINGS CANYON UNIFIED SCHOOL DISTRICT	1/1/1976
SAN JOAQUIN VALLEY UNIFIED APCD	KINGS CANYON UNIFIED SCHOOL DISTRICT	12/31/1976
SAN JOAQUIN VALLEY UNIFIED APCD	LAMONT SCHOOL DISTRICT	1/1/1976
SANTA BARBARA COUNTY APCD	CUYAMA JOINT UNIFIED SCHOOL DISTRICT	1/1/1976
SHASTA COUNTY AQMD	GATEWAY UNIFIED SCHOOL DISTRICT	1/1/1974
SHASTA COUNTY AQMD	GATEWAY UNIFIED SCHOOL DISTRICT	8/1/1974
SHASTA COUNTY AQMD	SHASTA UNION HIGH SCHOOL DISTRICT	1/1/1974
SISKIYOU COUNTY APCD	BIG SPRINGS UNION ELEM SCHOOL DISTRICT	5/1/1973
SOUTH COAST AQMD	A B C UNIFIED SCHOOL DISTRICT	12/30/1976
SOUTH COAST AQMD	AZUSA UNIFIED SCHOOL DISTRICT	12/1/1975
SOUTH COAST AQMD	RIM OF THE WORLD UNIFIED SCHOOL DISTRICT	5/1/1973
SOUTH COAST AQMD	RIM OF THE WORLD UNIFIED SCHOOL DISTRICT	5/1/1974
SOUTH COAST AQMD	RIM OF THE WORLD UNIFIED SCHOOL DISTRICT	5/1/1974
SOUTH COAST AQMD	RIM OF THE WORLD UNIFIED SCHOOL DISTRICT	5/1/1976
SOUTH COAST AQMD	RIM OF THE WORLD UNIFIED SCHOOL DISTRICT	5/1/1976
SOUTH COAST AQMD	TEMECULA VALLEY UNIFIED SCHOOL DISTRICT	1/1/1970
SOUTH COAST AQMD	TEMECULA VALLEY UNIFIED SCHOOL DISTRICT	1/1/1976
TUOLUMNE COUNTY APCD	SONORA UNION HIGH SCHOOL	1/1/1974
TUOLUMNE COUNTY APCD	SONORA UNION HIGH SCHOOL	1/1/1976
TUOLUMNE COUNTY APCD	SUMMERVILLE UNION HIGH SCHOOL	1/1/1974
VENTURA COUNTY APCD	FILLMORE UNIFIED SCHOOL DISTRICT	1/1/1972

Table F-1
List of Pre-1977 Model Year Public School Buses Still in Operation in California as of January 2008

Air District	School District	Mfg date
VENTURA COUNTY APCD	FILLMORE UNIFIED SCHOOL DISTRICT	1/1/1972
VENTURA COUNTY APCD	FILLMORE UNIFIED SCHOOL DISTRICT	1/1/1975
VENTURA COUNTY APCD	VENTURA UNIFIED SCHOOL DISTRICT	8/18/1975

APCD = Air Pollution Control District
AQMD = Air Quality Management District
NO = North

Appendix G

School Bus Engines Available in California

Appendix G School Bus Engines Available in California

Table G-1 below describes the heavy-duty school bus engines that have been determined to meet the emission criteria to be eligible for funding under the Lower-Emission School Bus Program. There may be other engine models, not shown, that may meet the emission criteria to be eligible for funding. For engine model year 2008 and 2009, applicants should refer to the engines Executive Order to determine eligibility in the program.

Table G-1
Heavy-Duty School Bus Engines Available in California Engines
Meeting 1.4 g NOx + NMHC/bhp-hr

				Certified Emissions g/bhp-hr				
Engine Manufacturer	Model Year	Engine Model	Engine hp Range	NOx FEL	NOx + NMHC FEL	PM std	Fuel	School Bus Manufacturer
Caterpillar	2007	C-7	190 (207)	1.16	1.3	0.01	Diesel	Blue Bird
International	2007	MaxxForce 7	200	-- --	1.2	0.01	Diesel	IC Corp
International	2007	DT 466	210-230	1.10	1.1	0.01	Diesel	IC Corp
International	2007	DT 466	245-300	1.40	1.4	0.01	Diesel	IC Corp
Cummins	2007	ISC	260	1.44	1.4	0.01	Diesel	Blue Bird & Thomas Built
DDC/MB	2007	MBE926	190-330	1.16	1.3	0.01	Diesel	Thomas Built
Clean Fuels	2007	GM 8.1 L	325	-- --	0.5	-- --	Propane	Bluebird

2007 model year John Deere CNG engines certified to 1.24 g/bhp-hr NOx FEL may still be available
2008 model year Cummins ISL G CNG engines are anticipated to be available in school bus configurations in 2008

The 2007 model year Cummins ISB 6.8 liter 200 horsepower (hp) range diesel engine is currently certified to a 2.2 g/bhp-hr NOx+NMHC FEL, and does not qualify for funding under the Lower-Emission School Bus Program.

Appendix H

Types of Retrofit Devices

Appendix H Types of Retrofit Devices

Currently, all verified Level 3 diesel emission control strategies include a diesel particulate filter (DPF). DPFs remove particulate matter in diesel exhaust by filtering exhaust from the engine and are the most commonly available aftertreatment device. Installation involves integrating the DPF into the vehicle's exhaust system. In many cases the DPF replaces the existing engine muffler.

Two basic types of DPFs are typically used: active regeneration and passive regeneration. Successful application of DPFs on new or existing diesel engines requires a robust filter regeneration scheme that periodically oxidizes the collected soot present on the filter to maintain engine backpressure within specified limits. These regeneration methods include both active systems that require supplemental energy to burn off or initiate soot combustion, such as the Cleaire Horizon or passive systems, that are designed to burn off this soot without energy input beyond that provided by the engine exhaust gas, such as the Donaldson DPF. Most Level-3 DPF devices utilize passive technology.

In general, passive DPFs remove particulate matter by collecting particles and oxidizing them during vehicle use. The oxidation process is referred to as regeneration. Passive DPFs typically rely on a precious metal catalyst contained in the filter to allow regeneration at common engine exhaust temperatures. The exhaust temperatures required for regeneration may vary from one control strategy to another. However, there is usually an exhaust temperature requirement of 260 degrees C (500°F) for at least 25 percent of the driving cycle.

For active filters, the regeneration temperature is achieved by means of an external heat source. There is no exhaust temperature requirement for this type of system. This typically involves installation of an electric or other heat source to increase oxidation in the filter. The currently verified active filter is uncatalyzed and relies on the operator "plugging-in" the vehicle whenever the filter requires regeneration. Infrastructure requirements for these devices typically require a 208 volt, 100 amp dedicated circuit be installed. Regeneration for this type of system is done approximately every 500 miles and usually takes 5 hours.

In addition to collecting soot, filters also collect inorganic based exhaust constituents such as ash, that periodically need to be removed. Engine oil consumption, total ash content of engine lubricant formulations, vehicle duty cycles, filter designs, and fuel-born catalyst dosing rates will all impact ash accumulation rates and the required filter maintenance cleaning intervals. As various types of ash slowly accumulate within the filter, the pressure drop through the filter gradually increases and the backpressure on the engine increases. Since excessively high backpressure on the engine will result in the degradation of engine performance, this ash material needs to be removed periodically. This ash removal or cleaning operation is a necessary filter maintenance procedure.

Generally, filter manufacturers recommend this maintenance to occur every 6 to 24 months depending on the condition of the engine, engine lubricant consumption rates, and the number of miles driven.

Ash cleaning practices include combinations of pressurized dry air streams directed at the exit side of the filter with industrial vacuum devices used on the inlet side to safety collect ash removed from the filter and/or very high temperature treatments of filters that are used before or after air cleaning procedures to remove organic materials and soot that may be contained in the filter.

Because California laws may vary depending on location, ash collected from used filters must be disposed of according to local, state, and/or federal solid waste disposal regulations. If zinc is present in the ash collected from a filter in high concentrations, this material may be characterized as a hazardous waste. The generator of the waste has the responsibility to determine whether their waste is hazardous or not. This generally requires a chemical analysis of the ash sample to determine the zinc content. There are facilities in California that accept hazardous waste from conditionally exempt small quantity generators. Additional guidance concerning acceptable disposable methods is available from the California Department of Toxic Substances Control.

Table H-1 below shows the currently verified Level 3 verified diesel emission control systems that may be applicable to engines found in school buses. There may be diesel retrofit devices that are currently in the verification process that may be suitable for school bus applications. A current and update list of all ARB-verified diesel emission control devices can be found at http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm .

Table H-1 Currently Verified Level 3 Technologies for On-Road School Buses(a) (as of January 2008)					
Plus (+) designates these systems as compliant with 2009 N02 requirements.					
Product Name	PLUS	Technology Type	PM Reduction	NOx Reduction	Applicability
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.
Donaldson DPM		DPF	85%	N/A	1993-2004 on-road; CARB diesel; biodiesel.
Engine Control System Purifilter (Low Load)	+	DPF	85%	N/A	1994-2004 on-road; CARB diesel; biodiesel.
Engine Control System Purifilter (High Load)		DPF	85%	N/A	1993-2006 on-road; CARB diesel; biodiesel.
International Truck and Engine Corporation DPX		DPF	85%	N/A	1994-2003 on-road Navistar (International); CARB diesel.
Johnson Matthey Reformulated CRT		DPF	85%	N/A	1994 - 2006 on-road; CARB diesel; biodiesel.
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.

(a) The HUSS Umwelttechnik FS-MK device, although verified for engines that are used in school buses, is not at present available for use on school buses in California. Because the HUSS system taps into the fuel system, the CHP requires crash safety testing before they will safety certify a school bus with a HUSS installed.

Appendix I

Biodiesel Use in New and Retrofitted School Buses

Appendix I Biodiesel Use in New and Retrofitted School Buses

Biodiesel is a clean burning alternative fuel, which can be produced from domestic, renewable resources such as soybeans or corn feedstock. Biodiesel refers to the pure form of the fuel or B100. When blended with diesel fuel, the blends are denoted as "BXX" with "XX" representing the percentage of biodiesel contained in the blend. For example, B20 is 20 percent biodiesel and 80 percent petroleum diesel. Use of biodiesel blends is generally expected to reduce diesel particulate matter and organic compounds; however, NOx emissions may increase. These effects tend to increase as the percent of biodiesel in the blended fuel increases. According to the US Environmental Protection Agency B20 can have the effect of increasing NOx emissions between 2-5 percent depending on the feedstock used to make the biodiesel and the petroleum diesel fuel biodiesel is blended with. The use of biodiesel can provide reductions in greenhouse gas emissions when the entire lifecycle of production is compared to that of petroleum diesel fuel. B20 has been estimated to reduce lifecycle greenhouse gas emissions by about 15 percent, and B5 is estimated to provide a lifecycle greenhouse gas emission reduction of about 4 percent.

The ARB is currently involved in the Biodiesel and Renewable Diesel Research Study. This research is evaluating in part the emission characterization of biodiesel, the potential health effects of biodiesel emissions, the mechanism of the excess NOx formation and possible NOx mitigation options. This research is anticipated to be completed in 2009.

The ARB has a draft advisory on biodiesel use that was last revised on November 14, 2006. The ARB staff recommends that if biodiesel blends are used in on-road diesel vehicles, the biodiesel portion of the blend complies with 1) the American Society for Testing and Materials (ASTM) specification D6751 applicable for 15 ppm sulfur content and 2) Title 13, California Code of Regulations (CCR), sections 2281 and 2282 (diesel regulations). ARB staff recommends that biodiesel blends contain no more than 20 percent biodiesel by volume and these fuels should be purchased from a reputable supplier, preferably from a certified BQ-9000 marketer and accredited distributor.

New School Buses

Users of biodiesel blends should determine if the use of biodiesel blends up to 20 percent will affect their engine warranties and are advised to avoid use of fuel that would negate a warranty. Biodiesel blends above 20 percent should not be used in new school buses while the engine warranty is still in effect. Based on current understanding of biodiesel fuels and blending with petroleum based diesel fuel, Engine Manufacturers Association (EMA) members expect that blends up to a maximum of 5 percent (B5) should not cause engine or fuel system problems, provided the B100 used in the blend meets the requirements of ASTM D 6751 and the final blend meets ASTM D 975. The EMA statement on biodiesel can be found at: http://www.enginemanufacturers.org/admin/library/upload/924.pdf. If blends exceeding

5 percent are desired, vehicle owners and operators should consult their engine manufacturer regarding the implications of using such fuel. Biodiesel statements issued by school bus engine manufacturers can be found at http://www.biodiesel.org/resources/fuelfactsheets/standards_and_warranties.shtm .

Diesel Retrofit Devices

Vehicles retrofitted with verified devices under Title 13, CCR, sections 2700 through 2710 can use biodiesel blends up to 20 percent, so long as the retrofit method employed on the engine was verified based on the use of commercial diesel fuel meeting CCR, sections 2281 and 2282 and for the purpose of reducing diesel particulates only. Vehicles retrofitted with verified devices for both diesel particulate and oxides of nitrogen must not use biodiesel since biodiesel use may increase nitrogen oxide emissions.

Older school buses that have historically been using petroleum diesel fuel may need to follow certain maintenance procedures to enable a seamless transition to biodiesel blends. Biodiesel can act as a solvent in the fuel tank and fuel system, cleaning fuel system components and causing fouling of fuel lines, injectors and other fuel system components. Therefore, school bus fleets that are considering switching to biodiesel blends must consult with their engines' manufacturer to discuss the proper procedure to follow to ensure that damage is not done to the fuel system. Biodiesel can potentially have a corrosive effect on the fuel systems hoses and o-rings, therefore a school bus fleet operator must consult their engines' manufacturer before converting to biodiesel blends.

The draft ARB advisory on biodiesel use discusses other applicable state requirements that biodiesel blends must meet. Use of biodiesel blends greater than 20 percent are not recommended at this time. The draft advisory is posted on our web site at http://www.arb.ca.gov/fuels/diesel/altdiesel/111606biodsl_advisory.pdf .

Appendix J

List of School Bus Data Fields

Appendix J List of School Bus Data Fields

A. School Bus Program Database Fields Overview

The School Bus Program database has been developed in response to the in-progress accountability requirements associated with the Proposition IB funding for the continuation of the Lower-Emission School Bus Program. The school bus database is designed to collect data submitted by applicants that have entered into fully executed contracts (i.e. contracts signed by both parties.)

The items in the School Bus Program Database Fields List must be completed to the extent possible in order for the required semi-annual reports to be generated accurately. All data fields must be completed once the contract is completed (i.e. when the applicant/vendor has been reimbursed for a completed project.)

B. School Bus Program Database Fields

The tables below list the information that each implementing agency is required to collect and enter for the School Bus Program database. Table J-1 lists the information common to all contracts. Table J-2 lists the information needed for each old bus being replaced. Table J-3 lists the information needed for each new bus being purchased. Table J-4 lists the information needed for each fueling station funded. Table J-5 lists the information needed for each bus being retrofit. Table J-6 lists the information needed about the retrofit device being purchased for the bus listed in Table J-5. Table J-7 identifies the information needed to track interest earned and interest spent to date. These fields must be updated every six months, prior to printing the semi-annual report.

Table J-1 **School Bus Database Contract Information**
Air District Name (whose LESBP funding allocation is funding the projects on contract)
Air District Contract Number
Applicant Type (school district, JPA, or private transportation agency)
Applicant Name
Applicant Address
Applicant City
Applicant Zip Code
Date Contract Signed
Date of Contract Completion (when applicant/vendor is reimbursed for a completed project)
Applicant Contact Person Name
Applicant Contact Person Title
Applicant Contact Person Phone Number
Applicant Contact Person Fax Number
Applicant Contact Person E-mail Address
Number of buses to be replaced (estimate)
Number of buses to be retrofitted (estimate)
Amount funded by 07/08 LESBP bond funding (estimate)
Amount funded by LESBP interest earned on bond funding (estimate)
The following fields repeat to accommodate a non-school district (i.e. JPA or private transportation company) projects with multiple buses or retrofits that may be associated with several school districts.
Select School District associated with project (if not a school district applicant)
Percent of time this (or these) replacement bus (or buses) is (or are) associated with the selected school district (up to 100 percent)
Percent of time this (or these) retrofitted bus (or buses) is (or are) associated with the selected school district (up to 100 percent)

Table J-2 School Bus Database Old Buses being Replaced
Bus Identification Number
Vehicle Identification Number (should be a unique number in database)
Bus Manufacturer
Bus Model
Bus Model Year (1986 or older)
Engine Serial Number (ESN) (should be a unique number in database)
Engine Manufacturer
Engine Model
Engine Model Year (1986 or older)
Engine Displacement
Bus Type: C/D/Special Needs
Gross Vehicle Weight Rating (GVWR) (should be greater than 14,000 pounds)
Fuel Type: CNG, Diesel, Electric, Gasoline, Propane
License Plate Number
Current California Highway Patrol Bus Safety Certificate: Yes/No (the LESBP requirement is for the old bus being replaced to be currently certified AND continuously certified since December 31, 2005 AND a that the Air District must have a copy of the current CHP Form 292 in the Air District files)
Documentation of Bus Disposal Method: Yes/No (the Air District must have the Bus Disposal Documentation in the Air District files)
Bus Storage Address
Bus Storage City
Bus Storage Zip Code

Table J-3 School Bus Database New Buses being Purchased
Bus Identification Number
Vehicle Identification Number (should be a unique number in database)
Bus Manufacturer
Bus Model
Bus Model Year (2007 or newer)
Engine Serial Number (ESN) (should be a unique number in database)
Engine Manufacturer
Engine Model
Engine Model Year (2007 or newer)
Engine Displacement
Bus Type: C/D/Special Needs
Gross Vehicle Weight Rating (GVWR) (should be greater than 14,000 pounds)
Fuel Type: Hybrid-Electric, CNG, Diesel, Electric , Propane
Purchase Order Date
Date of Bus Delivery
Bus Price
Date Air District/Implementing Agency Reimbursed the School District/Vendor
Amount funded by 07/08 LESBP bond funding
Amount funded by LESBP interest earned on bond funding
Match Funding Amount
Match Funding Source

Table J-4 School Bus Database Fueling Station Information
New Fueling Station Funded: Yes/No
Cost of Fueling Station
Date Air District/Implementing Agency Reimbursed the School District/Vendor
Amount funded by 07/08 LESBP bond funding
Amount funded by LESBP interest earned on bond funding
Number of Buses that Fueling Station would serve
Operational Date
Fueling Station Address
Fueling Station City
Fueling Station Zip Code

Table J-5 School Bus Database Buses being Retrofit
Bus Identification Number
Vehicle Identification Number (should be a unique number in database)
Bus Manufacturer
Bus Model
Bus Model Year
Engine Serial Number (ESN) (should be a unique number in database)
Engine Manufacturer
Engine Model (Air District staff must check if the Level 3 Retrofit Device chosen by the applicant is verified for this bus engine – Check Executive Order on ARB web site)
Engine Model Year (1987 or newer)
Engine Displacement
Bus Type: C/D/Special Needs
Gross Vehicle Weight Rating (GVWR)
License Plate Number
Fuel Type: CNG, Diesel, Electric, Propane
Did CHP inspect the retrofitted bus after the retrofit was installed: Yes/No (the retrofitted bus must be inspected post-retrofit installation and before returning to service AND the Air District must have a copy of the inspection documentation [either Form 343 or 343A] in the Air District files)
Cumulative Mileage
Bus Storage Address
Bus Storage City
Bus Storage Zip Code

Table J-6 School Bus Database Level 3 Retrofit Devices being Purchased
Level 3 Retrofit Device Manufacturer and Name of Device
Cost of Level 3 Retrofit Device (including tax and installation)
Cost of Additional Expenses (infrastructure, cleaning, data-logging)
Infrastructure Cost
Cleaning Cost
Data-logging Cost
Purchase Order Date
Retrofit Device Dealer/Installer
Retrofit Installation Date
Amount funded by 07/08 LESBP bond funding
Amount funded by LESBP interest earned on bond funding
Date Air District/Implementing Agency Reimbursed the School District/Vendor

Table J-7 School Bus Database Other Inputs Needed
Total Grant Allocation for the Air District
Spending Target for New Buses
Number of pre-1977 buses in Air District eligible for replacement
Spending Target for Retrofits
Interest Earned to Date
Interest Spent to Date

The Lower-Emission School Bus Program Guidelines (LESBP) (2008 Guidelines) describes revisions to comply with requirements of Proposition 1B, the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, and its enabling legislation, Senate Bill 88 (SB 88; Stats 2007 Ch 181) and the accountability requirements of Governor Schwarzenegger's EO S-02-07, as well as to make necessary administrative and technical updates. The 2008 Guidelines were approved by the California Air Resources Board on March 27, 2008. Since that date, a series of revisions and clarifications have been issued and are listed below starting with the most recent update. The 2008 Guidelines must be used along with the subsequent advisories.

Advisory / Mailout No.	Date	Title
08-001	7/1/2008	Documentation of Compressed Natural Gas (CNG) Fueling Station and Active Retrofit Devices Infrastructure Expenditures
08-002	7/1/2008	Documentation of Continuous Safety Certification
08-003	7/1/2008	Using AB 923 Funds to Replace 1987-1993 Model Year Two-Stroke Engine School Buses
08-27	9/24/2008	Match Funding Options For 1977 - 1986 Model Year School Bus Replacements
08-36	12/10/2008	Eligible Costs for School Bus Replacements
09-01	1/5/2009	Eligible Applicants for New Replacement School Buses
09-02	1/5/2009	Proposition 1B School Bus Program Funding
09-18	5/1/2009	School Bus Equipment Option
09-24	7/15/2009	Lower-Emission School Bus Program Advisory 09-002 Eligible Project Restrictions And Revisions To Implementation Deadlines
09-24 Attachment	7/15/2009	Lower-Emission School Bus Program Advisory 09-002 Eligible Project Restrictions And Revisions To Implementation Deadlines Attachment
09-46	12/23/2009	Lower-Emission School Bus Program Mail-Out--Extension Of Contract Execution Dates For Replacement School Buses With Model Year 2009 Engines
09-47	12/23/2009	Public Workshop To Discuss Revisions To The Lower-Emission School Bus Program And The Carl Moyer Program
10-11	3/18/2010	Lower-Emission School Bus Program Mail-Out--Project Restrictions And Revisions To Implementation Deadlines
10-11 Attachment	3/18/2010	Specific Implementation Deadline-Related Revisions to the 2008 Lower-Emission School Bus Program Guidelines
10-19	4/19/2010	Lower-Emission School Bus Program Mail-Out--Replacement Of School Buses With CHP Safety Certification Documentation Options
10-24	5/10/2010	Board Approved Near-Term Revisions to the Lower-Emission School Bus Program Guidelines and the Carl Moyer Program Guidelines

10-24 Attachment	5/25/2010	Revised Language for the 2008 LESBP Guidelines
10-36	8/25/2010	Lower-Emission School Bus Program Mail-out. Fifth and Sixth Installment of Bond Funding
10-45	10/18/2010	Lower-Emission School Bus Program Mail-out. Additional Flexibility Using Assembly Bill 923 to Fund Replacement School Buses and Clarification of Alternative-Fueled Terminology
11-02	1/26/2011	Lower-Emission School Bus Program Mail-Out 11-02 - 2011 Model Year Emission Standards Required For Program Funding
11-16	5/25/2011	Lower-Emission School Bus Program --- 2008 Guideline Revisions
11-17	8/16/2011	Lower-Emission School Bus Program --- Retrofit Eligibility
11-31	10/11/2011	Administrative Clarifications For Incentive Programs: Diesel Particulate Filters That Must Be Replaced Or For Which Sales Have Been Suspended By the Manufacturer
11-37	12/20/2011	The Lower-Emission School Bus Program --- Guideline Revisions
12-15	8/9/2012	The Lower-Emission School Bus Program - Expenditure Deadline Extension And Movement Of Funds
12-15 Attachment		The Lower-Emission School Bus Program - Expenditure Deadline Extension And Movement Of Funds Attachment - Redirection of Funds to Another District
12-18	9/25/2012	The Lower-Emission School Bus Program - Revisions To Implementation Deadlines
13-02	1/22/2013	The Lower-Emission School Bus Program - 2013 Model Year Replacement Bus Emission Criteria - Effective January 1, 2013 To December 31, 2013
13-21	8/30/2013	The Lower-Emission School Bus Program - Guidance For Transferring Ownership And Terminating A Contract For A Grant-Funded School Bus
13-33	12/27/2013	The Lower-Emission School Bus Program - Replacement Bus Emission Criteria - Effective January 1, 2014 to December 31, 2014
14-12	9/2/2014	The Lower-Emission School Bus Program - Clarification of Dismantling Requirements
15-01	1/12/2015	The Lower-Emission School Bus Program - Replacement Bus Emission Criteria - Effective January 1, 2015 to December 31, 2015
15-19	10/13/2015	The Lower-Emission School Bus Program - Using Assembly Bill 923 Funds for Zero-Emission School Bus Fleet Expansions and All-Electric School Bus Conversions

15-25	11/2/2015	Proposed Revisions to the Carl Moyer Program Guidelines and to the Lower-Emission School Bus Program Guidelines as a Result of Senate Bill 513
15-26	10/21/2015	The Lower-Emission School Bus Program - Replacement School Bus Emission Criteria - Effective January 1, 2016 Until Rescinded
15-30	12/18/2015	Approved Revisions to the Carl Moyer Program Guidelines and to the Lower-Emission School Bus Program Guidelines as a Result of Senate Bill 513
15-30 Attachment B	12/18/2015	Approved Revisions to the Carl Moyer Program Guidelines and to the Lower-Emission School Bus Program Guidelines as a Result of Senate Bill 513 Attachment B - Revised Language for the 2008 Lower-Emission School Bus Program Guidelines
20-03	2/20/2020	Lower-Emission School Bus Program Mail-Out #MSC 20-03 - Flexibility When Using Assembly Bill 923 to Fund Replacement School Buses

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

School Bus Program Advisory 08-001

Documentation of Compressed Natural Gas (CNG) Fueling Station and Active Retrofit Devices Infrastructure Expenditures

Last updated July 2008

This Policy Advisory is to inform the air districts of the documentation required to be maintained (collected and filed) for expenditures on a fueling station or on infrastructure for an active retrofit device. The air district must collect the following documentation prior to reimbursing an applicant for expenditures and an applicant must maintain the following documents as well.

1. School Bus Fueling Stations for CNG Buses

An amount equal to ten percent of ARB funding for a new alternative-fueled bus may be spent on a fueling station when no local CNG refueling site is available or the existing local CNG refueling site is inadequate. Since the cost cap for ARB funding on a new bus is set at $140,000, the cost cap on the fueling station funding is $14,000.

Infrastructure (fueling station) monies must be fully expended by the same deadline(s) by which the monies to purchase new buses must be fully expended. Infrastructure funds cannot be set aside and spent at a later date. Infrastructure funds may be utilized only if they are tied to infrastructure funds spent for the specific bus purchased.

Air districts shall retain in the project file the following documents for each fueling station funded with State program funds.

- Application (can be the same as for the new bus but includes a section for the alternative-fuel infrastructure)
- Documentation for alternative-fuel infrastructure must state:
  - the current alternative-fuel infrastructure on-site
  - the number of alternative-fuel vehicles on-site
  - the distance to the nearest alternative-fuel station
- Resolution from the school district governing board (or other documentation signed by a duly authorized official) authorizing the submittal of the application and identifying the individual authorized to implement the infrastructure project.
- Vendor quotes
- Executed contracts
- Copy of the purchase order

- Invoice(s)
- Proof of payment (i.e. a photo copy of the check)

These files shall be retained for the contract term plus two years.

2. School Bus Infrastructure for Active Retrofit Devices

Within the $20,000 retrofit funding cap, air districts may allocate funding for infrastructure (such as additional electrical outlets) needed to accommodate active retrofit devices. This funding is separate from the $2,500 allocation for diesel particulate filter (DPF) maintenance.

Air districts shall retain following documents for infrastructure costs funded with State program funds.

- Application (can be the same as for the active retrofit devices but includes a section addressing the need for infrastructure funding)
- Documentation for alternative-fuel infrastructure must state:
  - the current infrastructure (number of outlets) on-site
  - the number of vehicles that use the infrastructure
- Resolution from the school district governing board (or other documentation signed by a duly authorized official) authorizing the submittal of the application and identifying the individual authorized to implement the retrofit project.
- Vendor quotes
- Executed contracts
- Copy of the purchase order
- Invoice(s)
- Proof of payment (i.e. a photo copy of the check)

These files shall be retained for the contract term plus two years.

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

School Bus Program Advisory 08-002

Documentation of Continuous Safety Certification

Last Updated August 2008

This Policy Advisory informs air districts of alternate forms of documentation that may be used to document the continuous safety certification of school buses that are to be replaced following the requirements of the 2008 Lower-Emission School Bus Program Guidelines (2008 Guidelines).

Background. The 2008 Guidelines state that, to be eligible for replacement, a bus must have a current California Highway Patrol (CHP) safety certification (CHP form 292 – Inspection Approval Certificate) as of December 31, 2005, and have continuous safety certification from that point forward. State funds are limited, and this requirement was established to ensure unused buses are not revived in order to get funding. If a school district is unable to obtain copies of the CHP form 292 that demonstrate continuous safety certification as of December 31, 2005, then, *along with a copy of the current CHP form 292,* the air district must require the school district to provide one of the following sets of documentation listed below. The following options must be considered in the order that they are provided below.

1. Copies of CHP forms 343 (Safety Compliance Report/Terminal Record Update), 343A (Vehicle/Equipment Inspection Report Motor Carrier Safety Operations), or 407F/343A-Aspen (Driver/Vehicle Examination Report) may be accepted by an air district as documentation to demonstrate that a school bus has the safety certification that is granted by a CHP form 292. CHP form 407F/343A-Aspen is a newer version of CHP form 343A. Sufficient copies of CHP forms 343, 343A, or 407F/343A-Aspen must be provided for a school bus to show continuous safety certification during the time period from December 31, 2005 through the date on the current CHP form 292. A CHP form 292 safety certification lasts for 13 months.

   The CHP form 343, 343A, or 407F/343A-Aspen must state that the bus has a CHP form 292 certificate, and the form must include the date and the CHP inspector's name and ID/badge number. CHP forms 343, 343A, and 407F/343A-Aspen are not typically signed by CHP inspectors, and an inspector's name and ID/badge number are acceptable in lieu of an inspector's signature on these forms.

2. If CHP forms 343, 343A, or 407F/343A-Aspen are not available as the documentation for continuous safety certification, then the air district must request that the school district obtain from the CHP a letter that attests to the fact that the school bus has been continuously safety certified, as would be proven by a CHP form 292, since December 31, 2005. The CHP letter can include multiple buses; however, each bus must be identified by its vehicle identification number, license plate number, and the name of the school district that owns the bus.

3. If the school district is unable to provide to the air district the documentation listed in numbers 1. or 2. above, then the air district should consult with ARB staff. In addition, per the 2008 Guidelines, air districts have additional flexibility to fund school buses with safety certifications that have lapsed in the past. The 2008 Guidelines state that on "a case-by-case basis, an air district may use AB 923 funding as the primary source of funding to replace a school bus that has a CHP safety certification (CHP form 292) that has lapsed in the past. In this instance, the bus must have a current CHP safety certification (CHP form 292), and the air district must make the determination that the school bus is being used regularly by the school district."

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

School Bus Program Advisory 08-003

Using AB 923 Funds to Replace 1987-1993 Model Year Two-Stroke Engine School Buses

Last updated August 2008

This Policy Advisory is to inform the air districts of additional flexibility in replacing buses with Assembly Bill (AB) 923 funds. Currently, only 1986 and older model year buses are eligible for replacement using AB 923 funds. However, a number of 1987 and newer model year school buses are powered by two-stroke engines, typically Crown and Gillig buses, and no Level 3 retrofit devices have been ARB-verified for use on two-stroke engines. Since the primary goal of the Lower-Emission School Bus Program is to reduce school children's exposure to smog-forming and cancer-causing pollution by providing grants to upgrade our State's aging school bus fleet, ARB has determined that AB 923 funds can be used to replace 1987 and newer model year buses powered by a two-stroke engine.

AB 923 Funds

Funds provided through AB 923 (AB 923; Stats. 2004, Ch. 707) are a source of new school bus purchase funding. This legislation has provided a mechanism for air districts to increase the motor vehicle registration fee surcharge from four dollars to six dollars. The additional two dollar surcharge may be used by air districts for projects in four different clean air categories, including the "new purchase of school buses pursuant to the Lower-Emission School Bus Program adopted by the state board."[1]

AB 923 requires that the purchase of school buses with AB 923 funds be pursuant to the 2008 Lower-Emission School Bus Program Guidelines. However, the Air Resources Board has provided air districts with additional flexibility when spending AB 923 funds including:

- The dates in the Lower-Emission School Bus Program Timetable do not apply to AB 923 funds.

[1] Assembly Bill 923, Firebaugh, Chapter 707, Statutes of 2004. Available at http://www.leginfo.ca.gov/pub/03-04/bill/asm/ab_0901-0950/ab_923_bill_20040923_chaptered.html.

• Air districts report expenditures of AB 923 funds, including AB 923 funds spent pursuant to the 2008 Lower-Emission School Bus Program Guidelines, through a process established within the 2008 Carl Moyer Program Guidelines.

• On a case-by-case basis, an air district may use AB 923 funding to replace a school bus that has a CHP safety certification (CHP form 292) that has lapsed in the past. In this instance, the bus must have a current CHP safety certification (CHP form 292), and the air district must make the determination that the school bus is being used regularly by the school district.

Additional Exception for Spending AB 923 Funds to Purchase New School Buses

The ARB is adding another exception to this list in the 2008 Lower-Emission School Bus Program Guidelines. The additional exception for spending AB 923 funds to purchase a new school bus is as follows:

- An air district may use AB 923 funding to replace a 1987 or newer model year school bus powered by a two-stroke engine.

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue Suite 4
El Monte, California 91731 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

September 24, 2008 Mail-Out #MSC 08-27

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM ADVISORY 08-004
MATCH FUNDING OPTIONS FOR 1977 – 1986 MODEL YEAR SCHOOL BUS REPLACEMENTS (*LAST UPDATED SEPTEMBER 2008)*

This Policy Advisory is to inform air districts of the Lower-Emission School Bus Program position regarding waiving the $25,000 match requirement for replacement of 1977-1986 model year (MY) school buses. School districts have raised concerns about their ability to meet the match funding requirement. This Advisory is in alignment with the Board's direction given to staff during the public hearing on March 27, 2008 for the Lower-Emission School Bus Program 2008 Guidelines and provides limited options for meeting the match.

Background

The success of the Lower-Emission School Bus Program is based on partnerships formed with local air districts and school districts. While Proposition 1B funds provide the opportunity for a large-scale State program, these funds alone are not sufficient to replace every eligible bus.

Consistent with previous program guidelines, public school districts are not required to provide match funds when replacing pre-1977 MY buses. However, to maximize the use of State funds, school districts are required to provide $25,000 in match funding when replacing eligible middle aged (1977-1986 MY) school buses. This amount is less than 20 percent of the $140,000 that the ARB is providing to fund each replacement bus.

At the local level, air districts have a greater ability to analyze the specific needs of the school districts in their regions and to determine how to best assist those eligible with the match funding requirements. ARB encourages local air districts to partner in California's effort to replace school buses by using its local funds to assist school districts, as deemed necessary, with funds to cover their required matching. ARB also encourages school districts to seek other funding sources, such as California Department of Education grants to supplement local funds. These grants are available to small school districts and may be used to cover the match as long as all program requirements are followed.

What type of match waiver would be allowed with Proposition 1B funds?

ARB will grant local air districts the authority to provide partial waivers for the match requirement when deemed necessary. The air district may use Proposition 1B funds to cover $15,000 of the match requirement for 20% of the buses funded with State funds in its respective air district. The remaining portion of the match ($10,000) must still be provided through local school or air district funding.

Lake County Air Pollution Control District represents a very unique circumstance as it does not have the legal authority to raise motor vehicle fees following Assembly Bill 923 (AB 923, Stats 2004, Ch 707). Therefore, the ARB grants this district the authority to use Proposition 1B funds to pay for a full waiver for the match requirement for 20% of the buses funded in its air district. **Note: If an air district is legally able to generate AB 923 funds to support local school districts, but has chosen not to, a full waiver of the match will not be provided.**

Where would the school districts apply for a match waiver?

School districts would apply to the local air district. In some cases, the local air districts have already agreed to use its local funds to cover the school district's match requirement. Hence the school districts are strongly encouraged to apply directly to the local air district. For the 16 districts where the ARB is the implementing agency, school districts located in these respective regions would apply directly to the ARB.

If the air district determines that there is a need to use Proposition 1B funds to pay for a partial waiver, the air district would make the determination as to which buses would receive a waiver with Proposition 1B funds. It is important to understand that funds in each air district are limited, and the air district also has the flexibility to spend the equivalent amount of Proposition 1B funds used to pay for a waiver, to cover the cost of other school bus related projects in their district, such as retrofits. Retrofits are the most cost-effective method of reducing exposure to emissions from school buses and are a vital component of this program because they provide the greatest health benefit per dollar spent. In late 2008, the ARB will consider a regulation designed to reduce both NO_x and diesel PM emissions from heavy-duty on-road vehicles, including school buses in public and private fleets. The Lower-Emission School Bus Program is an opportunity to install retrofit devices on public school buses before it is required. ARB believes that for this reason, as well as the wide range of varying needs from region to region, it is necessary to allow each air district the discretion in determining which buses qualify for a waiver in their district.

What factors should an air district consider in determining the buses receiving the waiver?

Some of the factors the air district may consider are listed below. The factors may be used individually on its own merits or in combination.

1) **Buses with the highest mileage.** Based on the applications selected for funding, the air district may consider the oldest buses operating the most miles as an indicator of a school district with limited resources.

2) **California's free and reduced priced meals program.** Based on the applications selected for funding, the air district may also use the percentage of students eligible to participate in the free and reduced priced meals program for each school district that applies and compare that with the statewide participation rates. This information is available from a California Department of Education (CDE) nutrition program. Please go the CDE website at http://www.cde.ca.gov/ds/sh/cw/documents/frpm2007.xls to review this information. Those school districts that have a high percentage of students participating in the program may have less of an ability to provide the match.

3) **Localized Impacts.** Based on the applications received, the air district may consider localized impacts and determine if the school district is located in a higher risk community, including those designated under environmental justice status. The district may consider information regarding the district's population exposure to toxic contaminants and demographic data (e.g. income and ethnic group statistics) to determine who should receive the match waiver.

ARB recognizes that the factors presented above may not cover every situation in each region when determining the needs of each school district. Each air district may have additional factors to consider. Ultimately, whatever indicators are chosen, the local air district must document its methodology in its district's Policies and Procedures Manual. If this manual has already been approved by ARB, an amendment documenting the district's policy for granting a match waiver using Proposition 1B funds must be submitted for final approval. Approval of the district's amended Policies and Procedures Manual would not hold up the district's funding disbursement.

The local air district must also indicate in its report to ARB, which buses received a partial waiver for the match funding requirement using Prop 1B funds. Records listing what buses received the waiver should also be maintained for the term of the contract plus two years.

Should you have any questions regarding this advisory, please contact Janet Page, Air Pollution Specialist, at (916) 324-1988 or jpage@arb.ca.gov .

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: Janet Page
Air Pollution Specialist
Planning and Regulatory Development

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Ave. Suite 4
El Monte, California 91734 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

December 10, 2008 Mail-Out #MSC 08-36

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM ADVISORY 08-005 ELIGIBLE COSTS FOR SCHOOL BUS REPLACEMENTS (LAST UPDATED DECEMBER 2008)

This policy advisory will provide air districts and public school districts participating in the Lower-Emission School Bus Program guidance regarding eligible costs for new replacement school buses.

The Lower-Emission School Bus Program funds the purchase of new replacement school buses and alternative fuel infrastructure. All school buses eligible for replacement must be replaced with 2007 model year or newer diesel or alternative fueled buses equipped with engines certified to 1.44 g NOx/bhp-hr or cleaner and 0.01 g PM/bhp-hr or cleaner. In addition, eligible costs for school buses must be based on an ARB endorsed, currently valid California Approved Bids (CABs) that have been formally adopted by a California public school district governing board to fulfill their student transportation needs.

CABs contain several equipment specifications that bidders must comply with. However, the ARB will only fund optional equipment for the new replacement bus that is similar to the equipment on the old bus that is being replaced. Other options deemed necessary to safely operate the new bus, such as extended warranties, video equipment, air conditioning units, and other equipment may be considered an ineligible cost without detailed justification being submitted.

State law requires public school districts to purchase school buses with school board approved bids. In order to expedite the lengthy bid process, most CABs have "piggyback" provisions that other public school districts can utilize. Typically school districts will piggyback off existing bids and add or remove equipment options to satisfy the needs of their school district.

Because of time constraints and funding eligibility requirements under Proposition 1B, ARB will approve funding for replacement buses that contain only standard equipment on CABs. ARB's goal is to fund replacement school buses that are as durable as the decades old buses they are replacing, fulfilling their duties safely transporting public school children from home to school.

School bus duty requirements vary in rural, urban, mountain, and valley environments of California, and specialized equipment needs may be considered reasonable in these settings. Equipment that a school district feels is standard and necessary, and that is not standard equipment on a CAB, will be considered on a case-by-case basis only. Justification must be provided to the implementing agency for items such as transmission retarders or AC units. However, regardless of the equipment on a bus, State program funds will only provide $140,000 towards the replacement cost of a school bus.

To insure that school districts get fair access to available school bus replacement funds, clarification on what buses are eligible for funding and which options can be included in the award of program funds, endorsed CABs are posted at: http://www.arb.ca.gov/bonds/schoolbus/bids/bids.htm.

ARB, Air Districts, and/or the Department of Finance will conduct inspections and audits to insure that program funds are spent appropriately.

If you have any questions, please contact Mr. Earl Landberg, Air Pollution Specialist, at (916) 323-1384 or @ elandber@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: Earl Landberg
Air Pollution Specialist
On-Road Control Regulations

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Ave Suite 4
El Monte, California 91734 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

January 5, 2009 Mail-Out #MSC 09-01

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM ADVISORY 08-006
ELIGIBLE APPLICANTS FOR NEW REPLACEMENT SCHOOL BUSES
(LAST UPDATED DECEMBER 2008)

This policy advisory provides air districts and public school districts participating in the Lower-Emission School Bus Program guidance regarding eligible applicants for new replacement school buses.

Background

Since the creation of the program, Lower-Emission School Bus Program funding has targeted replacing the oldest school buses in the state and retrofitting in-use buses, to ensure that the program reduces children's exposure to smog-forming and cancer-causing pollution. School bus replacement funds have always been oversubscribed, going almost exclusively to public school districts. Since there are other public entities that provide public, K-12, student home-to-school transportation, clarification of which public entities are eligible to participate in the replacement portion of the Lower-Emission School Bus Program is needed.

Eligible Applicants

Public School Districts: The 2008 Lower-Emission School Bus Program Guidelines (Guidelines) describe eligible applicants for replacement funds as "Public school districts in California that own their own buses..." This includes public school districts that own their buses but contract with a County Office of Education or private contractor for maintenance and operations.

Joint Power Authorities: The 2008 Guidelines also state "Where a Joint Power Authorities (JPA) has been formed by several public school districts, and the JPA holds ownership of the school buses, then the JPA is also eligible to participate."

Public Charter Schools: The intent of this advisory is to clarify that other public entities that provide public, K-12, student home-to-school transportation are also eligible to receive funding for the replacement of older school buses provided the buses to be

replaced meet the requirements of the Lower-Emission School Bus Program. One such entity is public charter schools.

County Offices of Education acting as a public school district: County Offices of Education are not public school districts. However, there are circumstances where a County Office of Education acts as a public school district such as taking over and operating a 'failing' public school or operating a public school for any other reason. In these cases, County Offices of Education are eligible to receive funding for the replacement of older school buses provided the buses to be replaced meet the requirements of the Lower-Emission School Bus Program.

Ineligible Applicants

School Transportation Contractors: School transportation contractors are not eligible to apply for school bus replacement funds. This includes County Offices of Education under contract to provide public, K-12, student home-to-school transportation.

Non-Profit Agencies, Private Schools, and Private Companies: Also, school bus purchases by non-profit agencies, private schools, and other private companies are not eligible for State program funding.

If you have questions regarding the Lower-Emission School Bus Program Advisory 08-006 Eligible Applicants for New Replacement School Buses, please contact Ms. Lisa Jennings, Air Pollution Specialist, at (916) 322-6913 or ljenning@arb.ca.gov .

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: Ms. Lisa Jennings
Air Pollution Specialist
Planning and Regulatory Development Section

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

January 5, 2009 Mail-Out #MSC 09-02

To: All Interested Parties

Subject: LOWER-EMISSION SCHOOL BUS PROGRAM ADVISORY 08-007 PROPOSITION 1B SCHOOL BUS PROGRAM FUNDING (Last Update December 22, 2008)

This Policy Advisory is to inform the air districts, local school district, and new school bus and diesel particulate filter vendors that the Air Resources Board has been instructed to freeze all new disbursements of Proposition 1B funds that support the Lower-Emission School Bus Program and to grant a suspension of pending deadlines for the program.

Background

Due to the delay in enacting solutions to the current fiscal year budget crisis, the State Treasurer's Office has been unable to access the bond market to generate funds for General Obligation bond programs such as the Lower-Emission School Bus Program. As a result, until there is a resolution to the budget, and a restoration of the State's ability to access the bond market, all State agencies and departments have been instructed to cease entering into new grants or agreements that commit the expenditure of General Obligation bond funds and freeze disbursements on existing grants.

Program Implementation

Additional disbursements of Program funds will not be issued until such time as the State Treasurer's Office has access to the bond market and therefore Program staff have the ability to reestablish the Program disbursement process.

Lower-Emission School Bus Program staff will be extending the February 1, 2009, deadline for executed contracts and school bus ordering for pre-1977 school bus replacement, as well as, other Program milestones as needed to accommodate the disruption in the disbursement process. **At this time all implementation deadlines currently outlined in the 2008 Lower-Emission School Bus Program guidelines are on hold until further notice.** Additional information on modifications to the Lower-Emission School Bus Program milestones will be forthcoming, if needed.

If you have any questions regarding this advisory, please contact Mr. Earl Landberg, Air Pollution Specialist, at elandber@arb.ca.gov or (916) 323-1384.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: Earl Landberg

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91734 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

May 1, 2009 Mail-Out #MSC 09-18

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM ADVISORY 09-001
SCHOOL BUS EQUIPMENT OPTIONS (LAST UPDATED APRIL 2009)

This policy advisory discusses the level of justification required to support many of the options available on school buses. All school buses must be purchased using a California Approved Bid (CAB). See School Bus Advisory 08-005: http://www.arb.ca.gov/bonds/schoolbus/advisory/advisory.htm.

A transit style, model year 2008, diesel-fueled school bus costs approximately $140,000, including sales tax. Per the 2008 Lower-Emission School Bus Program (LESBP) Guidelines, maximum program funding CANNOT exceed $140,000 per bus. For all but pre-1977 school buses there is a $25,000 match requirement. Below are examples of school bus costs and the approximate amounts that the LESBP will pay with the required $25,000 match.

Type of Bus	Approximate Cost	Required Match	Approximate Amount LESBP Will Fund
Diesel	$140,000	$25,000 match	$115,000
CNG	$160,000	$25,000 match	$135,000
Hybrid or Alt fuel	$200,000	$25,000 match + $35,000 additional funds from school district or air district	$140,000

Many school bus quotes include options. The Air Resources Board (ARB) does not restrict the options on buses paid for by funds other than LESBP funds. There are restrictions on the options that are allowed to be paid for with LESBP funds: NOT every option is eligible for funding. Table 1 and Table 2 below identify: 1) options that can be paid for with LESBP funds and 2) options that cannot be paid for with LESBP funds.

Table 1: School Bus Options for School Bus Grant Amounts EQUAL TO or LESS THAN $115K for a diesel bus, $135K for a CNG bus, or $140K for a hybrid or alternatively-fueled bus	
Options that CANNOT be paid for with LESBP funds	**Options that CAN be paid for with LESBP funds (WITHOUT written justification or case-by-case approval from the ARB)**
• Extended Warranties • Aluminum Wheels • 10” Brakes • Surveillance Camera Systems • DVD and Video Entertainment System	• Transmission Retarder • Air Conditioning • Automatic Tire Chains • All Options OTHER THAN Those Listed in Left Column

Table 2: School Bus Options for School Bus Grant Amounts MORE THAN 115K for a diesel bus, or 135K for a CNG bus	
Options that CANNOT be paid for with LESBP funds	**Options that CAN be paid for with LESBP funds (WITH written justification[1])**
• Extended Warranties • Aluminum Wheels • 10” Brakes • Surveillance Camera Systems • DVD and Video Entertainment System	• Transmission Retarder • Air Conditioning • Automatic Tire Chains
	Options that CAN be paid for with LESBP funds (If approved by ARB on a case-by-case basis)
	• All Options OTHER THAN Those Listed in Left Column

[1] **Written justification** must be retained in the project file and adhere to one or more of the following :
- The bus to be replaced (old bus) is equipped with this option
- It is common/consistent with the fleet
- It is required for safety
- It is necessary for the bus route
- Funding from LESBP CANNOT exceed $140,000, therefore, for Hybrid or Alternatively fueled buses, all options excluding those in the left hand column in Table 2 can be included on the bus without written justification

Air districts, please submit your case-by-case approval request with your written justification directly to the Air Resources Board, MSCD Lower-Emission School Bus Program, Post Office Box 2815, Sacramento, California 95812.

If you have any questions regarding this Lower-Emission School Bus Program Advisory, please contact Mr. Warren Hawkins, Air Pollution Specialist, at (916) 324-6771 or email at whawkins@arb.ca.gov .

Sincerely,

\s\

Robert H. Cross, Chief
Mobile Source Control Division

cc: Mr. Warren Hawkins
Air Pollution Specialist
Planning and Regulatory Development Section

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

July 15, 2009 Mail-Out #MSC 09-24

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM ADVISORY 09-002 ELIGIBLE PROJECT RESTRICTIONS AND REVISIONS TO IMPLEMENTATION DEADLINES

This advisory provides air districts and public school districts participating in the Lower-Emission School Bus Program (LESBP) guidance regarding eligible expenditures with the April 2, 2009 and April 28, 2009 rounds of Bond funding. The expenditure of April 2, 2009 Bond funds is not subject to additional restrictions beyond those already in the 2008 LESBP Guidelines. However, the April 28, 2009 Bonds are Build America Bonds, and the expenditure of those funds is therefore subject to additional restrictions beyond those already in the 2008 LESBP Guidelines.

In addition, this advisory adjusts implementation deadlines outlined in the 2008 LESBP Guidelines to accommodate Bond funding delays, and to allow for flexibility given the uncertainty in the timing of full Bond funding for the LESBP. Please note that, implementation deadline-related revisions to the 2008 LESBP Guidelines are provided in Attachment 1 in the form of strikeout and underline revisions and a new timetable.

Background

Funding for the LESBP is part of the voter-approved Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 (Proposition 1B). Due to the downturn in the economy, the State was unable to leverage the bond market to generate funds in support of Proposition 1B. On December 18, 2008, the Department of Finance issued a stop work notice for all general obligation bond funded programs. The Air Resources Board (ARB) complied with this order, and directed the air districts to cease activity as well.

The recent sales of Bonds that were issued on April 2, 2009 and April 28, 2009 provided approximately $83 million to restart the LESBP. Air districts that received funds prior to the December 2008 stop work order (subsequently funded with April 2, 2009 Bond funds), and/or districts that will receive funds from the April 28, 2009 Bonds, may resume their LESBP once they have received written notification from ARB.

ARB highly recommends the funding of retrofits with the current Bond funds once an air district has replaced all pre-1977 model year buses. Our analysis shows that retrofitting school buses is a very cost-effective way of reducing emissions. In fact, retrofitting seven school buses can cost less and achieve more emission reductions than replacing one school bus. Districts that have available AB 923 funds may choose to use those funds for future replacement projects. Please note that AB 923 funds may not be used to fund any portion of a LESBP retrofit project.

For information on funding amounts for your air district from the bonds issued on April 2nd and April 28th of 2009, please go to: http://www.arb.ca.gov/bonds/gmbond/docs/2009_05_20_external_prop_1b_funds_distribution.pdf. Please note that funding amounts from the Bonds issued on April 2, 2009 are located in the column titled, "Paid to Local Agencies – 2008," and funding amounts from the Bonds issued on April 28, 2009 are located in the column titled, "Distribution of May 2009 Funds."

Eligible Expenses for April 2, 2009 Bond Funds

The expenditure of April 2, 2009 Bond funds is not subject to additional restrictions beyond those already in the 2008 LESBP Guidelines.

Eligible and Ineligible Expenses for April 28, 2009 Bond Funds

The expenditure of April 28, 2009 Bond funds (BAB funds) is subject to the following restrictions, in addition to those already in the 2008 LESBP Guidelines:

The April 28, 2009 Bond funds **DO NOT** allow expenditures for the following:

- Contracts for services associated with the maintenance of retrofit devices,
- Administration costs for administering or participating in the LESBP.

Revisions to Implementation Deadlines in the 2008 Lower-Emission School Bus Program Guidelines

On March 27, 2008, the ARB approved revisions to the LESBP Guidelines. ARB staff issued the approved 2008 LESBP Guidelines on April 15, 2008. This section of the advisory adjusts implementation deadlines outlined in the 2008 LESBP Guidelines to accommodate Bond funding delays, and to allow for flexibility given the uncertainty in the timing of full Bond funding for the LESBP.

Specific implementation deadline-related revisions to the 2008 LESBP Guidelines are provided in Attachment 1 in the form of strikeout and underline revisions and a new timetable.

As ARB receives future Bond funds, further funding for the LESBP may have restrictions on eligibility requirements that differ from the current funding. Clarifications of these restrictions will be disseminated at the time of funding.

If you have questions regarding this advisory, please contact Ms. Kimya Lambert, Air Pollution Specialist, at (916) 323-2507 or klambert@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

Attachment

cc: Ms. Kimya Lambert
Air Pollution Specialist
Planning and Regulatory Development Section

Specific Implementation Deadline-Related Revisions to the 2008 Lower-Emission School Bus Program Guidelines

This Advisory presents changes to the Guidelines as additions in bold, italicized, underlined font, and as deletions in bold, italicized, strikethrough font.

Chapter I: Program Overview

Page 7. Section G.5. School Bus Replacements.

The first paragraph of Section G.5 is revised as follows:

All school buses eligible for replacement must be replaced with 2007 model year or newer buses equipped with engines certified to 1.4 grams per brake horsepower-hour (g/bhp-hr) NO_x or cleaner and 0.01 g/bhp-hr PM. Because pre-1977 model year public school buses predate federal safety standards, they are a priority to replace. Consistent with previous guidelines, public school districts will not be required to provide match funds when replacing these buses. ***~~Applicants must enter into contracts with the implementing agency and have new buses ordered for pre-1977 model year replacements by February 1, 2009.~~***

Chapter III: Lower-Emission School Bus Replacement Program Requirements

Page 14. Section A.2. Buses Eligible for Replacement.

The second paragraph of Section A.2 is revised as follows:

SB 88 which provides legislative direction for the expenditure of Lower-Emission School Bus Program funds requires that all pre-1977 model year buses be replaced first. Hence the replacement of buses manufactured prior to April 1, 1977, when federal motor vehicle safety standards applicable to school buses went into effect, is a priority for the school bus replacement program. ***~~Local air districts must commit by fully executed contract, all of their State program funds designated for pre-1977 model year school bus replacements by February 1, 2009. In addition, all replacement buses for pre-1977 model year buses must be paid for and in operation no later than February 1, 2010.~~ Replacement buses must be delivered by April 1, 2011.***

Chapter V: Administrative Responsibilities of Air Districts and the ARB in Implementing the Lower-Emission School Bus Program

1. Page 28. Section G. Milestones and Timetable for State Program Funding.

The introductory paragraph of Section G is revised as follows:

*This section covers key program milestones****~~, an abridged timetable (Table V-1),~~*** *and describes remediation plans and reconciliation requirements****~~,~~*** *for the Lower-Emission

School Bus Program. The dates listed in ~~***Table V-1***~~ ***the timetable in Appendix D*** *are the final dates for execution of the designated activities conducted with State program funding.* ~~***The expanded timetable is provided in Appendix D.***~~

2. Page 28. Section G.1. Milestones.

Section G.1 is revised as follows:

1. Milestones

This section further describes some of the major performance milestones set forth in the ~~***expanded***~~ *program timetable (Appendix D). Air districts must meet these milestones in order to demonstrate progress in meeting the goals of the Lower-Emission School Bus Program.*

- *Beginning on* ***April 30, 2008****, the ARB will make State program funds available to air districts by mailing Grant Award and Authorization Forms to air districts. An air district may begin requesting funds after its Policies and Procedures Manual (see Section K) is approved by the ARB. An air district must provide the documents listed in Section J.1 to receive its initial disbursement.*

- *Beginning* ~~***February***~~ ***November*** ***1, 2009****, when the air districts' first semiannual reports are due, ARB will perform a needs assessment to check each air district's progress and ability to implement a local program.*

- *By* ~~***March***~~ ***December*** *1, 2009, based upon air districts'* ~~***February***~~ ***November*** *1, 2009 demonstration of performance, the ARB will determine if direct implementation – that is implementation of a local program by the ARB, with CAPCOA's assistance – of additional local programs is necessary. The funds spent within each air district will be the same regardless of what organization implements the program.*

- ~~***August 1, 2009. If an air district does not meet the milestone(s) for this date, then the air district must submit a remediation plan to the ARB.***~~

- ~~***February 1, 2010. If an air district does not meet the milestone(s) for this date, then the air district must submit a remediation plan to the ARB.***~~

- ~~***August 1, 2010. If an air district does not meet the milestone(s) for this date, then the air district must submit a remediation plan to the ARB.***~~

3. Page 29. Section G.1. Table V-1. Abridged Lower-Emission School Bus Program Timetable.

Table V-1, the Abridged Lower-Emission School Bus Program Timetable, is deleted.

4. Page 30. Section G.2. Remediation Plans

Section G.2 is revised as follows:

2. Remediation Plans

~~ARB staff will meet with non-performing districts and develop remediation plans with the objective of meeting program goals, recognizing that the situation will be different in each district.~~

ARB staff will review air districts' semiannual reports to monitor program implementation and to identify any causes for concern about the timely expenditure of available funds. Based on the content of the reports (or on the failure to submit reports regarding available State program funds), ARB staff reserves the right to meet – via teleconference or in person – with air districts to develop remediation plans with the objective of meeting program goals, recognizing that the situation will be different in each district.

5. Section N. Process of Making Awards to Successful Applicants.

Section N is revised as follows:

- Page 35. Second sentence of the first paragraph of Section N:

  The implementing agency shall determine the application due dates necessary to complete the program according to the ***~~expanded~~*** *program timetable in Appendix D.*

- Page 38. Third sentence of Section N.3.b:

  Reports must be submitted (i.e., entered into the bond accountability database, printed, signed, and mailed) by the dates listed in ***~~Table V-1 and~~*** *Appendix D.*

6. Section O. Liquidated Damages for Late Delivery of School Buses.

Section O is revised as follows:

- Page 39. First paragraph of Section O:

  The ARB will hold liable for liquidated damages the business entity responsible for a delay that results in the failure to deliver program-funded school buses to school districts by ***~~February 1, 2010 (for pre-1977 model year bus replacements) or~~*** *April 1, 2011* ***~~(for 1977-1986 model year bus replacements)~~****. Specifically, the liquidated damages will be in the amount of $100 per day per bus for each day a bus is delivered after* ***~~February 1, 2010 (for pre-1977 model year bus replacements) or~~*** *April 1, 2011* ***~~(for1977-1986 model~~***

~~year bus replacements)~~*. The purpose of charging liquidated damages is to ensure a level playing field for all business entities that stand to profit from the sale of program-funded school buses, to minimize any potential risks to school districts, and to forestall delays in achieving emission benefits. Implementing agencies must review school districts' purchase orders for new buses to ensure that the purchase orders include the liquidated damages clause set forth in Appendix C: Minimum Contract Requirements of these Guidelines.*

- Page 39. Third sentence of the second paragraph of Section O:

  For each bus delivered late, the air districts shall reduce the grant payment to either the school bus distributor or the school district (depending on the contract arrangements for the payment of bus purchase orders) by $100 per day per bus for each day a bus is delivered after the ***~~applicable~~*** *deadline.*

Appendix C: Minimum Contract Requirements

Page C-4. Section M. New Bus Purchase Delivery Deadlines and Liquidated Damages

- The third paragraph of Section M is revised as follows:

  For every day after ***~~[insert applicable deadline:~~*** *April 1, 2011* ***~~or February 1, 2010]~~*** *in which a bus has not been delivered as specified in the contract, the school district shall be liable to the implementing agency for liquidated damages in the amount of $100 per day per bus purchased with funds from the Lower-Emission School Bus Program.*

- The fourth paragraph of Section M is revised as follows:

  For every day after ***~~[insert applicable deadline:~~*** *April 1, 2011* ***~~or February 1, 2010]~~*** *in which a bus has not been delivered as specified in the contract, the school bus distributor/vendor shall be liable to the school district for liquidated damages in the amount of $100 per day per bus purchased with funds from the Lower-Emission School Bus Program.*

Appendix D: Lower-Emission School Bus Program Expanded Timetable

1. Title Page and p. D-1

   The title of Appendix D is revised as follows:

   Lower-Emission School Bus Program ***~~Expanded~~*** *Timetable*

2. Page D-1

The first paragraph of Appendix D is revised as follows:

This appendix is the complete Lower-Emission School Bus Program Timetable. ~~***It is an expanded version of the abridged timetable that is presented in Table V-1 of these Guidelines.***~~ *The dates shown are the final dates for execution of the designated activities conducted with State program funding.*

3. Table D-1

Table D-1, the "Expanded Lower-Emission School Bus Program Timetable," is deleted and replaced with the following table.

CONTINUED

Table D-1 Lower-Emission School Bus Program Timetable	
Dates	**Milestones[(a)]**
March 27-28, 2008	Board approves air district allocations and Guidelines
April 30, 2008	**Funds made available to air districts by ARB** • Grant Award and Authorization Forms mailed by ARB
Beginning May 2008 and ongoing	**Initial disbursements to air districts based on readiness** (see Section J of Chapter V) **Additional disbursements from ARB to air districts based on demonstrated need** (see Section J of Chapter V) **ARB/CAPCOA begins direct implementation of Program, where applicable** **Pre-1977 model year (MY) bus replacement projects must be funded before any other projects are funded**
June 30, 2008	**100% of funds encumbered by ARB through Grant Award and Authorization Forms**
November 1, 2009	**First semiannual report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)
December 1, 2009	**Based upon November 1, 2009 demonstration of performance, ARB determines if direct implementation (by ARB/CAPCOA) of additional local programs is necessary**
April 1, 2010	**Recommended deadline to order new buses to replace pre-1987 MY buses** • Pre-1977 MY bus replacement projects must be funded before any other projects are funded
May 1, 2010	**Second semiannual report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)

Table D-1 Lower-Emission School Bus Program Timetable	
June 30, 2010	**Retrofit funding[(b)] may no longer be available for school buses due to proposed In-Use On-Road Heavy-Duty Diesel Vehicles Regulation** **Retrofit funding[(b)] must be fully expended**
November 1, 2010	**Third semiannual report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)
April 1, 2011	**All new buses delivered and infrastructure completed**
May 1, 2011	**Fourth semiannual report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)
June 30, 2011	• Deadline for full expenditure of Proposition 1B funds • 100% of funds paid out; all projects/equipment in operation • Funds outstanding as of this date must be returned to ARB within 60 days
November 1, 2011	**Final report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)

(a) This table contains a brief overview of milestones. Details regarding the criteria air districts must follow to meet these milestones are provided throughout these Guidelines.
(b) AB 923 funds cannot be used for Lower-Emission School Bus Program retrofit projects.

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

December 23, 2009 Mail-Out #MSC 09-46

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM MAIL-OUT -- EXTENSION OF CONTRACT EXECUTION DATES FOR REPLACEMENT SCHOOL BUSES WITH MODEL YEAR 2009 ENGINES

This mail-out provides Air Resources Board (ARB) guidance to air districts and public school districts participating in the Lower-Emission School Bus Program (LESBP) regarding contract execution dates for replacement projects with 2009 model year (MY) engines. Under this mail-out the deadline for executing contracts for these projects has been extended from December 31, 2009 to June 30, 2010.

Extension of Contract Execution Dates:

Implementation of the LESBP has been delayed by the slow release of bond funds in 2009. ARB is extending the contract execution deadline for school buses replaced with buses that have 2009 MY engines to June 30, 2010. This will allow air districts to help school districts get children into safer, less polluting transportation quickly and without further delay.

2010 Model Year Engine Emissions Standards

In addition, ARB staff is aware that school bus engines meeting the 2010 model year emission criteria of 0.2 grams per brake horsepower-hour oxides of nitrogen (NOx), as required in the 2008 LESBP guidelines, are not currently available. Staff is working on proposed changes to the guidelines to ensure continued availability of funds for replacements and will be taking our recommendations to the Board for consideration in March 2010.

If you have questions regarding this mail-out, please contact Ms. Janet Page, Air Pollution Specialist, at (916) 324-1988 or via email at jpage@arb.ca.gov.

Sincerely,

/s/

James N. Goldstene
Executive Officer

cc: Janet Page
Air Pollution Specialist
Planning & Regulatory Development Section

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

December 23, 2009 Mail-Out # MSC 09-47

TO: All Interested Parties

SUBJECT: PUBLIC WORKSHOP TO DISCUSS REVISIONS TO THE LOWER-EMISSION SCHOOL BUS PROGRAM AND THE CARL MOYER PROGRAM

The California Air Resources Board (ARB) invites you to participate in a public workshop to discuss proposed revisions to the Lower-Emission School Bus Program and the Carl Moyer Program Guidelines. The Lower-Emission School Bus Program (LESBP) provides incentive grants to reduce school children's exposure to harmful pollutants through purchases of replacement buses and the installation of retrofit technologies on existing buses. The Carl Moyer Program provides financial incentive grants to reduce emissions from various sources including on-road and off-road motor vehicles and agricultural engines.

At the workshop, ARB will discuss three proposed revisions to the LESBP Guidelines:

1) Update the emission criteria for 2010 model year (MY) replacement school buses.
2) Update the cost cap for the 2010 MY replacement school buses.
3) Extend the June 30, 2010 deadline for retrofit funding.

ARB held workshops in December to discuss proposed near-term revisions to the Carl Moyer Program Guidelines. ARB staff intends to modify various proposed revisions as a result of comments received at those workshops. ARB will present these changes during this January workshop.

These proposed revisions to the Carl Moyer Program Guidelines will be available prior to the workshop on the following website: http://www.arb.ca.gov/msprog/moyer/moyer.htm.

Information about the LESBP and the proposed revisions to the LESBP Guidelines will be available prior to the workshop on the following website: http://www.arb.ca.gov/bonds/schoolbus/schoolbus.htm.

Both program's proposed revisions are scheduled to be brought to the Board at the ARB Board Meeting on March 25-26, 2010.

The workshop is scheduled for:

DATE: Tuesday, January 26, 2010
TIME: 9:00 a.m. to 12:00 p.m.
PLACE: Cal/EPA Headquarters Building
Byron Sher Auditorium, 2nd Floor
1001 "I" Street
Sacramento, California 95814

For those unable to attend in person, the workshop will also be available via webcast. The broadcast can be accessed at http://www.calepa.ca.gov/broadcast/?bdo=1 on the day of the workshop. Information on submitting questions or comments will be provided during the webcast for remote participants.

If you require a special accommodation or need this document in an alternate format or language, please contact Lynsay Carmichael at (916) 322-0407 or lcarmich@arb.ca.gov as soon as possible, but no later than 10 business days before the scheduled event/meeting. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

If you have any questions regarding the workshop, please contact Lynsay Carmichael, Air Resources Engineer at (916) 322-0407 or via email at lcarmich@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: Lynsay Carmichael
Air Resources Engineer
Planning and Regulatory Development Section

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

March 18, 2010 Mail-Out #MSC 10-11

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM MAIL-OUT -- PROJECT RESTRICTIONS AND REVISIONS TO IMPLEMENTATION DEADLINES

This mail-out provides air districts and public school districts participating in the Lower-Emission School Bus Program (LESBP or Program) guidance regarding 1) eligible expenditures with the two October 15, 2009 installments of bond funding; and 2) project implementation deadlines for each of the four installments of bond funding. The expenditure of each installment of October 15, 2009 bond funding is subject to a different set of additional restrictions that are beyond those already in the 2008 LESBP Guidelines, and eligible and ineligible expenses for each of these installments are detailed in this mail-out.

In addition, this mail-out adjusts implementation deadlines outlined in the 2008 LESBP Guidelines to accommodate bond funding delays, allow for flexibility given the uncertainty in the timing of full bond funding for the LESBP, and reflect the extension of the deadline for full expenditure of Proposition 1B funds by one year to June 30, 2012. Please note that the implementation deadline-related revisions to the 2008 LESBP Guidelines 1) are provided in Attachment 1; 2) represent modifications made in addition to those made in Mail-Out #MSC 09-24; 3) indicate that two additional semiannual reports are required; and 4) reflect expanded replacement project deadlines.

Background

The LESBP has received a third (about $56.7 million of Build America Bond (BAB) funds) and fourth (almost $284,000 of non-BAB bond funding for administrative costs for air districts) installment of bond funds. Both installments are from the sales of bonds that were issued on October 15, 2009. With the four bond installments, the Program has received about 72 percent of its projected funding of approximately $194 million thus far.

For information on funding amounts for your air district from the bonds, please go to: http://www.arb.ca.gov/bonds/schoolbus/documents/3rd_4th_prop_1b_funds_distribution.pdf

IMPORTANT NOTE: For funds from the two October 15, 2009 bond issuances, this mail-out DOES NOT serve as written notification to air districts that these funds are available for their implementation of the Lower-Emission School Bus Program. Such written notification will be sent to air districts under separate cover by the Executive Officer of the Air Resources Board.

Eligible and Ineligible Expenses for Funds from Two October 15, 2009 Bond Issuances

Third Installment of Bond Funds – Approximately $56.7 Million of Build America Bond Funds

The expenditure of the third installment of bond funds – approximately $56.7 million of Build America Bond (BAB) funds – is subject to the following restrictions, in addition to those already in the 2008 LESBP Guidelines:

The October 15, 2009 BAB funds:

- **DO NOT** allow expenditures for contracts for services associated with the maintenance of retrofit devices.
- **DO NOT** allow expenditures for administration costs for administering or participating in the LESBP.

Fourth Installment of Bond Funds – Almost $284,000 of Non-BAB Funds

The expenditure of the fourth installment of bond funds – almost $284,000 of non-BAB funds – is subject to the following restrictions, in addition to those already in the 2008 LESBP Guidelines:

The October 15, 2009 non-BAB funds:

- Allow expenditures **ONLY FOR ADMINISTRATIVE COSTS** (allowable administrative costs are described in the 2008 LESBP Guidelines).
- **DO NOT** allow expenditures for project costs.

Revisions to Implementation Deadlines in the 2008 Lower-Emission School Bus Program Guidelines

On March 27, 2008, the Air Resources Board (ARB) approved revisions to the LESBP Guidelines. ARB staff issued the approved 2008 LESBP Guidelines on April 15, 2008. On July 15, 2009, in Mail-Out #MSC 09-24, ARB staff adjusted implementation deadlines outlined in the 2008 LESBP Guidelines to accommodate bond funding delays, and to allow for flexibility given the uncertainty in the timing of full bond funding for the LESBP. This section of the mail-out further adjusts implementation deadlines outlined in the 2008 LESBP Guidelines to continue to: accommodate bond funding delays, to allow for flexibility given the uncertainty in the timing of full bond funding for the LESBP, and to reflect the extension of the deadline for full expenditure of Proposition 1B funds by one year to June 30, 2012.

Specific implementation deadline-related revisions to the 2008 LESBP Guidelines are provided in Attachment 1 in the form of strikeout and underline revisions and a new timetable(s).

As the ARB receives future bond funds for the LESBP, different restrictions on eligibility requirements may apply to those funds. Clarifications of these restrictions will be disseminated at the time of funding.

If you have questions regarding this mail-out, please contact Kimya Lambert, Air Pollution Specialist, at (916) 323-2507 or via email at klambert@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

Attachment

cc: Kimya Lambert
Air Pollution Specialist
Planning & Regulatory Development Section

Specific Implementation Deadline-Related Revisions to the 2008 Lower-Emission School Bus Program Guidelines

This mail-out presents changes to the Guidelines as additions in bold, italicized, underlined font, and as deletions in bold, italicized, strikethrough font. Please note that this mail-out should be reviewed in concert with Mail-Out # MSC 09-24, since this mail-out further adjusts some of the modifications that were made in that mail-out.

Executive Summary

Page 1.

The last sentence of the fourth paragraph is revised as follows:

*Some of these low-emitting new buses may be on the road by the end of the year, while every one of the new and retrofitted buses will be in service transporting California's school children no later than June 30, **~~2011~~** **2012**.*

Chapter I: Program Overview

Page 9. Section G.8. Timetable.

The last sentence of Section G.8 is revised as follows:

*The ARB anticipates some school bus projects will begin as early as fall 2008; however, all State program funding must be paid out by June 30, **~~2011~~** **2012**.*

Chapter III: Lower-Emission School Bus Replacement Program Requirements

Page 14. Section A.2. Buses Eligible for Replacement.

The second paragraph of Section A.2 is revised as follows:

*SB 88 which provides legislative direction for the expenditure of Lower-Emission School Bus Program funds requires that all pre-1977 model year buses be replaced first. Hence the replacement of buses manufactured prior to April 1, 1977, when federal motor vehicle safety standards applicable to school buses went into effect, is a priority for the school bus replacement program. Replacement buses must be delivered by April 1, **~~2011~~** **2012**.*

Chapter V: Administrative Responsibilities of Air Districts and the ARB in Implementing the Lower-Emission School Bus Program

1. Page 28. Section G. Milestones and Timetable for State Program Funding.

   The introductory paragraph of Section G is revised as follows:

*This section covers key program milestones and describes remediation plans and reconciliation requirements for the Lower-Emission School Bus Program. The dates listed in the timetable**(s)** in Appendix D are the final dates for execution of the designated activities conducted with State program funding.*

2. Page 28. Section G.1. Milestones.

The introductory paragraph of Section G.1 is revised as follows:

1. Milestones

*This section further describes some of the major performance milestones set forth in the **~~program timetable (Appendix D)~~** **program timetable(s) in Appendix D**. Air districts must meet these milestones in order to demonstrate progress in meeting the goals of the Lower-Emission School Bus Program.*

3. Page 35. Section N. Process of Making Awards to Successful Applicants.

The second sentence of the first paragraph of Section N is revised as follows:

*The implementing agency shall determine the application due dates necessary to complete the program according to the **applicable** program timetable**(s)** in Appendix D.*

4. Section O. Liquidated Damages for Late Delivery of School Buses.

Section O is revised as follows:

- Page 39. First paragraph of Section O:

  *The ARB will hold liable for liquidated damages the business entity responsible for a delay that results in the failure to deliver program-funded school buses to school districts by **April 1, ~~2011~~ 2012**. Specifically, the liquidated damages will be in the amount of $100 per day per bus for each day a bus is delivered after **April 1, ~~2011~~ 2012**. The purpose of charging liquidated damages is to ensure a level playing field for all business entities that stand to profit from the sale of program-funded school buses, to minimize any potential risks to school districts, and to forestall delays in achieving emission benefits. Implementing agencies must review school districts' purchase orders for new buses to ensure that the purchase orders include the liquidated damages clause set forth in Appendix C: Minimum Contract Requirements of these Guidelines.*

- Page 39. The second paragraph of Section O:

  For the air districts that self-implement the program, the liquidated damages will be administered through a withhold by the ARB of five percent of the total grant

*fund award to each air district until after April 1, ~~**2011**~~ **2012**. Upon confirmation by each air district that all program-funded buses have been delivered to school districts by April 1, ~~**2011**~~ **2012**, the ARB will immediately release the remaining five percent of their respective grant awards to each air district. For each bus delivered late, the air districts shall reduce the grant payment to either the school bus distributor or the school district (depending on the contract arrangements for the payment of bus purchase orders) by $100 per day per bus for each day a bus is delivered after the deadline. The ARB will retain an amount equal to the calculated liquidated damages from the applicable air district's grant withhold. Upon confirmation of final bus delivery to the school districts, the ARB will then release the remaining grant award balance, if any, to the air district.*

5. Page 41. Section Q.2. Expenditures.

Section Q.2 is revised as follows:

2. Expenditures

*A Lower-Emission School Bus Program grant award is not considered to be fully expended until all of the funds in the grant award have been paid out by the implementing agency by paying invoices associated with approved projects. The final deadline for full expenditure of Lower-Emission School Bus Program State program funds, including funds that are designated for the purchase of re-fueling infrastructure, is June 30, ~~**2011**~~ **2012**. Any funds in the grant award that are not expended (paid out) by this date must be returned to the ARB. Any State program funding outstanding (i.e., has not been paid out) as of June 30, ~~**2011**~~ **2012** must be returned to the ARB within 60 days.*

6. Page 42. Section Q.3.d. Expenditure Deadline.

Section Q.3.d is revised as follows:

(d) Expenditure Deadline

*Because all Lower-Emission School Bus Program State program funds must be fully expended by June 30, ~~**2011**~~ **2012**, interest earned on those funds must also be fully expended by this deadline. Earned interest that is not fully expended by June 30, ~~**2011**~~ **2012**, must be returned to the ARB within 60 days from the deadline.*

Appendix C: Minimum Contract Requirements

1. Page C-2. Section F.1. Project Completion.

The third sentence of Section F.1 is revised as follows:

*The contract shall include a specified time frame in which project completion shall occur, so that the funds are fully expended by June 30, **~~2011~~ 2012**.*

2. Page C-4. Section M. New Bus Purchase Delivery Deadlines and Liquidated Damages

- The third paragraph of Section M is revised as follows:

  *For every day after April 1, **~~2011~~ 2012** in which a bus has not been delivered as specified in the contract, the school district shall be liable to the implementing agency for liquidated damages in the amount of $100 per day per bus purchased with funds from the Lower-Emission School Bus Program.*

- The fourth paragraph of Section M is revised as follows:

  *For every day after April 1, **~~2011~~ 2012** in which a bus has not been delivered as specified in the contract, the school bus distributor/vendor shall be liable to the school district for liquidated damages in the amount of $100 per day per bus purchased with funds from the Lower-Emission School Bus Program.*

Appendix D: Lower-Emission School Bus Program Timetable

1. Title Page and p. D-1

The title of Appendix D is revised as follows:

*Lower-Emission School Bus Program Timetable**(s)***

2. Page D-1

The first paragraph of Appendix D is revised as follows:

*This appendix **~~is~~** **contains** the **~~complete~~** Lower-Emission School Bus Program Timetable**(s)**. The dates shown are the final dates for execution of the designated activities conducted with State program funding. **Please note that the header of each timetable indicates the State program funding source – that is, the specific installment of bond funding – to which the timetable applies.***

3. Table D-1

Table D-1, the “Lower-Emission School Bus Program Timetable,” is deleted and replaced with the following table.

CONTINUED

Table D-1 **Lower-Emission School Bus Program Timetable** **for the First (April 2, 2009), Second (April 28, 2009 Build America Bonds (BAB)),** **Third (October 15, 2009 BABs), and Fourth (October 15, 2009 Non-BABs) Installments of Bond Funds**	
Dates	**Milestones[(a)]**
March 27-28, 2008	Board approves air district allocations and Guidelines
April 30, 2008	**Funds made available to air districts by ARB** • Grant Award and Authorization Forms mailed by ARB
Beginning May 2008 and ongoing	**Initial disbursements to air districts based on readiness** (see Section J of Chapter V) **Additional disbursements from ARB to air districts based on demonstrated need** (see Section J of Chapter V) **ARB/CAPCOA begins direct implementation of Program, where applicable** **Pre-1977 model year (MY) bus replacement projects must be funded before any other projects are funded**
November 1, 2009	**First semiannual report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)
December 1, 2009	**Based upon November 1, 2009 demonstration of performance, ARB determines if direct implementation (by ARB/CAPCOA) of additional local programs is necessary**
May 1, 2010	**Second semiannual report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)

Table D-1
Lower-Emission School Bus Program Timetable
for the First (April 2, 2009), Second (April 28, 2009 Build America Bonds (BAB)), Third (October 15, 2009 BABs), and Fourth (October 15, 2009 Non-BABs) Installments of Bond Funds

June 30, 2010	**Deadline for air districts to accept, by submitting fully executed grant amendments to the ARB, additional funding appropriated in the Budget Act of 2009** **Retrofit funding[(b)] may no longer be available for school buses due to proposed In-Use On-Road Heavy-Duty Diesel Vehicles Regulation** **Retrofit funding[(b)] must be fully expended**
November 1, 2010	**Third semiannual report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)
April 1, 2011	**Recommended deadline to order new buses to replace pre-1987 MY buses** • Pre-1977 MY bus replacement projects must be funded before any other projects are funded
May 1, 2011	**Fourth semiannual report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)
November 1, 2011	**Fifth semiannual report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)
April 1, 2012	• **All new buses delivered** • Accompanying infrastructure should be completed
May 1, 2012	**Sixth semiannual report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)
June 30, 2012	• Deadline for full expenditure of Proposition 1B funds • 100% of funds paid out; all projects/equipment in operation • Funds outstanding as of this date must be returned to ARB within 60 days
November 1, 2012	**Final report due** (i.e., information entered into database by air district; fiscal/program reconciled; air district prints and signs report and mails it to ARB)

(a) This table contains a brief overview of milestones. Details regarding the criteria air districts must follow to meet these milestones are provided throughout these Guidelines.
(b) AB 923 funds cannot be used for Lower-Emission School Bus Program retrofit projects.

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

April 19, 2010 Mail-Out #MSC 10-19

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM MAIL-OUT -- REPLACEMENT OF SCHOOL BUSES WITH CHP SAFETY CERTIFICATION DOCUMENTATION OPTIONS

This mail-out provides guidance to air districts and public school districts participating in the Lower-Emission School Bus Program (LESBP) to assist in expediting the replacement of school buses that have California Highway Patrol (CHP) safety certification documentation issues.

Background

The 2008 LESBP Guidelines require a bus eligible for replacement to have a current CHP safety certification (CHP form 292 - Inspection Approval Certificate) as of December 31, 2005, and to have continuous safety certification from that point forward. This requirement was established to ensure unused buses are not revived in order to get funding. Currently, if a school district is unable to obtain copies of CHP form 292 that demonstrate continuous safety certification as of December 31, 2005, then the air district must require the school district to provide alternative documentation along with a copy of the current CHP form 292. Acceptable alternative forms of this documentation are described in LESBP Advisory 08-002 available at: http://www.arb.ca.gov/bonds/schoolbus/advisory/adv08-002.pdf.

In addition to the process described above, Air Resources Board has identified two additional safety certification categories in which Air Districts have requested case-by-case approvals to use State funds to replace school buses: those school buses not continuously certified and those that are continuously certified but are having operational issues. Each category has specified requirements listed below.

Requirements for Non-Continuously Certified School Buses:

This option applies to school buses that have had a gap in their safety certifications previously, but are now currently in service. Air districts that wish to use AB 923 funds to fund a bus scheduled for replacement that has a gap in its safety certificate for any

reason, may use this option without obtaining a case-by-case approval from the ARB if the following requirements are met:

1) The school bus must have a current CHP safety certification,
2) A determination must be made by the air district that the bus is being used regularly by the school district,
3) If a bus is scheduled for replacement and its current safety certificate will not be renewed, the school district must notify the local air district of the reason for non-certification so that the local air district can determine if funding is still allowable,
4) If the air district approves funding for a bus with a lapse in the safety certificate, the local air district staff must notify the school district that their approval of funding for the bus in no way releases them from any other legal requirements. A school district's transportation director must document that the school district acknowledges and agrees that if the school bus does not have the required CHP safety certificate; it cannot be operated to transport school children. A copy of this statement must be sent to the local air district, and
5) Once a determination is made, the local air district must document their decision and the steps outlined above in the project file.

Requirements for Continuously Certified School Buses with Operational Issues:

This option applies to school districts with school buses that have had no gaps in CHP certification but have had recent operational issues. If a bus previously approved for replacement by a local air district has been continuously certified since December 31, 2005, but then experienced irreparable mechanical issues, such that it is not operational and cannot be certified. The local air district must be notified immediately that the safety certificate will not be renewed. The local air district may replace this bus using State LESBP bond funds.

It is important that air districts maintain in their project files detailed documentation of the entire decision process for both options described above. If you have questions regarding this mail-out, please contact Janet Page, Air Pollution Specialist, at (916) 324-1988 or via email at jpage@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: See next page.

cc: Janet Page
Air Pollution Specialist
Planning and Regulatory Development Section

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

May 10, 2010 Mail-Out #MSC 10-24

TO: All Interested Parties

SUBJECT: BOARD APPROVED NEAR-TERM REVISIONS TO THE LOWER-EMISSION SCHOOL BUS PROGRAM GUIDELINES AND THE CARL MOYER PROGRAM GUIDELINES

This mail-out presents near-term revisions to the Lower-Emission School Bus Program (LESBP or School Bus Program) Guidelines and Carl Moyer Memorial Air Quality Standards Attainment Program (CMP or Carl Moyer Program) Guidelines. These revisions were recently approved by the Air Resources Board (ARB or Board) at a public hearing in Sacramento, California on March 25, 2010. The following revisions became effective upon Board approval and are attached to this mail-out:

- Attachment 1 - Revised Language for the 2008 Lower-Emission School Bus Program Guidelines
- Attachment 2 - Revised Language for the Voucher Incentive Program Guidelines
- Attachment 3 - Revised Language for the 2008 Carl Moyer Program Guidelines
- Attachment 4 - Method for Estimating Fuel Consumption of a New Locomotive

If you have any questions or need further clarification, please contact Duong Trinh, Air Pollution Specialist, at (626) 350-6560 or via email at dtrinh@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: Duong Trinh
Air Pollution Specialist
Carl Moyer Off-Road Section

ATTACHMENT 1

REVISED LANGUAGE FOR THE 2008 LOWER-EMISSION SCHOOL BUS PROGRAM GUIDELINES

(Approved March 25, 2010)

Only those sections containing Board approved modifications from the 2008 Lower-Emission School Bus Program (LESBP) Guidelines are presented here. Additions to language are indicated by underlined text. Deletions to language are indicated by ~~strikeout~~. Unmodified portions of these sections, either before or after any added/deleted language, will be indicated by the symbol "* * * * *" and incorporated by reference, as necessary.

The 2008 LESBP Guidelines language will be revised as follows:

#1 – RAISE EMISSION REQUIREMENT FOR REPLACEMENT SCHOOL BUSES IN 2010

Chapter III. Lower-Emission School Bus Replacement Program Requirements
Page 15. B. Emission Standards and Certification Levels for School Buses

* * * * *

Table III-1 below, shows the emission criteria that replacement school bus contracts need to meet for each calendar year in order to qualify for program funding. ~~Starting in 2007, the average heavy-duty NOx emission standard is 1.2 g/bhp-hr. For this program, ARB will allow new buses that meet up to 1.44 g/bhp-hr NOx emission standards, as there are a couple of common school bus engines that come in at this level. The 2007 model year Cummins ISB 6.8 liter diesel-fueled engine is currently certified to a significantly higher level, 2.2 g/bhp-hr NOx+NMHC FEL. As such, its NOx + NMHC emission level does not qualify it for funding under the Lower-Emission School Bus Program.~~ If necessary, Table III-1 will be evaluated and updated at the staff level by the end of the first quarter of each year.

Table III-1 Emission Criteria for Use of Lower-Emission School Bus Program Funding by Calendar Year			
In 2007-2009 ~~Model Year~~ engines must meet:		In 2010 ~~Model Year~~ engines must meet:	
NO_x (g/bhp-hr) *	PM (g/bhp-hr)	NO_x (g/bhp-hr)	PM (g/bhp-hr)
1.44 NO_x FEL	0.01	~~0.2~~ 0.50 NOx FEL	0.01
FEL: family emission limit g/bhp-hr: grams per brake horsepower-hour * Both the NO_x FEL and the NO_x+NMHC FEL must be at or below 1.44 g/bhp-hr.			

* * * * *

#2 - STREAMLINE DISBURSEMENT PROCESS

Chapter V. ADMINISTRATIVE RESPONSIBILITIES OF AIR DISTRICTS AND THE ARB IN IMPLEMENTING THE LOWER-EMISSION SCHOOL BUS PROGRAM

Page 31. J. 1. Fund Disbursement to Air Districts

* * * * *

1. ~~Initial Disbursements~~ Documentation Required for Funds to be Disbursed

* * * * *

~~Initial disbursements will be made to air districts based on their readiness. For its initial disbursement, an air district should request:~~

- ~~100 percent of the allocation designated for replacing pre-1977 model year buses, if applicable; and~~
- ~~10 percent of the remainder of the allocation; and~~
- ~~50 percent of its administrative funds. Air districts will receive one check for both administrative and project funds. However, air districts must account for the administrative and project funds separately.~~

~~An air district may receive up to 65 percent of its total allocation through June 30, 2009.~~

2. ~~Additional~~ Disbursements

~~Additional disbursements will be made to air districts based on demonstrated need, i.e., at least 50 percent of funds from all previous disbursements must be under contract. For additional disbursements of Lower-Emission School Bus Program State program funds, air districts must submit a Grant Disbursement Request and provide~~

~~documentation (i.e., copies of fully executed contracts) that 50 percent of the funds from all previous disbursements are under contract.~~

~~An air district may request the other half of its administrative funds when 50 percent of the funds in its full Lower-Emission School Bus Program allocation have been committed. The air districts will again receive one check for both administrative and project funds and must account for the administrative and project funds separately.~~

Once an air district has provided the documentation required for funds to be disbursed, the air district must complete and submit the online Lower-Emission School Bus Program AIR DISTRICT GRANT DISBURSEMENT REQUEST located at http://www.arb.ca.gov/bonds/schoolbus/documents/disrequest.pdf. Funds will be disbursed based on the availability of bond funds.

Page 39. O. Liquidated Damages for Late Delivery of School Buses

* * * * *

~~For the air districts that self-implement the program, t~~The liquidated damages will be administered ~~through a withhold~~ by the ~~ARB~~ air districts ~~of five percent of the total grant fund award to each air district until after April 1, 2011. Upon confirmation by each air district that all program-funded buses have been delivered to school districts by April 1, 2011, the ARB will immediately release the remaining five percent of their respective grant awards to each air district.~~ As required in the contracts, ~~F~~for each bus delivered late, the air districts shall reduce the grant payment to either the school bus distributor or the school district (depending on the contract arrangements for the payment of bus purchase orders) by $100 per day per bus for each day a bus is delivered after the deadline. ~~The ARB will retain an amount equal to the calculated liquidated damages from the applicable air district's grant withhold. Upon confirmation of final bus delivery to the school districts, the ARB will then release the remaining grant award balance, if any, to the air district.~~

* * * * *

Appendix D. Lower-Emission School Bus Program Expanded Timetable

Page D-1. Table D-1 Expanded LESBP Timetable

* * * * *

Beginning May 2008 and ongoing	~~Initial d~~Disbursements to air districts based on ~~readiness~~ availability of funds (see Section J of Chapter V) ~~Additional disbursements from ARB to air districts based on demonstrated need (see Section J of Chapter V)~~ ARB/CAPCOA begins direct implementation of Program, where applicable Pre-1977 model year (MY) bus replacement projects must be funded before any other projects are funded

* * * * *

#3 - EXTEND RETROFIT FUNDING DEADLINE

Appendix D. Lower-Emission School Bus Program Expanded Timetable
Page D-3. Table D-1 Expanded LESBP Timetable

* * * * *

~~June 30, 2010~~	~~Retrofit funding may no longer be available for school buses due to proposed In-Use On-Road Heavy-Duty Diesel Vehicle Regulation~~ ~~Retrofit funding must be fully expended~~
June 30, 2012	• Deadline for full expenditure of Proposition 1B funds • 100% of funds paid out; all projects/equipment in operation • Funds outstanding as of this date must be returned to ARB within 60 days

* * * * *

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

August 25, 2010 Mail-Out #MSC 10-36

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM MAIL-OUT -- FIFTH AND SIXTH INSTALLMENT OF BOND FUNDING

This mail-out provides air districts and public school districts participating in the Lower-Emission School Bus Program (LESBP or Program) guidance regarding eligible expenditures with the last two installments of bond funding. The fifth installment of March 18, 2010 bond funds is not subject to additional restrictions beyond those already in the 2008 LESBP Guidelines. However, the April 1, 2010 bonds are Build America Bonds (BAB), and the expenditure of those funds is subject to additional restrictions, as explained below, beyond those already in the 2008 LESBP Guidelines.

IMPORTANT NOTE: For funds from the March 18, 2010 and the April 1, 2010 bond issuances, this mail-out DOES NOT serve as written notification to air districts that these funds are available for their implementation of the Lower-Emission School Bus Program. Such written notification will be sent under separate cover by the Executive Officer of the Air Resources Board.

Background

The LESBP has received a 5th (almost $44.5 million of bond funds for administrative and project costs) and 6th (about $9.8 million of BAB funds) installment of bond funds. With the 6 bond installments, the Program has received 100 percent of its projected funding of approximately $196 million.

For information on funding amounts for your air district from the bonds, please go to: http://www.arb.ca.gov/bonds/schoolbus/documents/5th_6th_installments.pdf

March 18, 2010 Bond Funds

These bond funds are subject to the restrictions in the 2008 LESBP Guidelines.

April 1, 2010 Build America Bond Funds

These funds are subject to the following restrictions, in addition to those already in the 2008 LESBP Guidelines:

- **DO NOT** allow expenditures for contracts for services associated with the maintenance of retrofit devices.
- **DO NOT** allow expenditures for administration costs for administering or participating in the LESBP.

Program deadlines described in Mail-Out #MSC 10-24 apply to both the 5th and 6th installments. If you have questions regarding this mail-out, please contact Lisa Jennings, Air Pollution Specialist, at (916) 322-6913, or via email at ljenning@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: Lisa Jennings
Air Pollution Specialist
Planning & Regulatory Development Section

bcc: Deborah Kerns, OLA
Julie Cress, OLA
Erik White, MSCD
Scott Rowland, MSCD
Heather Arias, MSCD
Tess Sicat, MSCD
Dave Salardino, MSCD
Charles Kersey, MSCD
Kimya Lambert, MSCD

ORCB#6003 Advisory Fifth and Sixth Installments

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

October 18, 2010 Mail-Out # MSC 10-45

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM MAIL-OUT -- ADDITIONAL FLEXIBILITY USING ASSEMBLY BILL 923 TO FUND REPLACEMENT SCHOOL BUSES AND CLARIFICATION OF ALTERNATIVE–FUELED TERMINOLOGY

This mail-out provides guidance to air districts and public school districts participating in the Lower-Emission School Bus Program (LESBP) that use Assembly Bill 923 (AB 923) funds for replacing school buses. Currently, the LESBP allows for replacement of only 1986 and older model year (MY) buses and 1987 and newer MY buses powered by a two-stroke engine.

AB 923 Funds Background

Funds provided through AB 923 (AB 923; Stats. 2004, Ch. 707) are a source of new school bus purchase funding. This legislation provided a mechanism for air districts to increase the motor vehicle registration fee surcharge by 2 dollars to fund projects in 4 different clean air categories, including the "new purchase of school buses pursuant to the Lower-Emission School Bus Program adopted by the state board."[1]

AB 923 requires that the purchase of school buses with AB 923 funds be pursuant to the 2008 LESBP Guidelines. Previously, the Air Resources Board (ARB) expanded flexibility in the Guidelines with Mail-out #08-003 including:

- The dates in the LESBP Timetable do not apply to AB 923 funds.
- Air districts report expenditures of AB 923 funds, including AB 923 funds spent pursuant to the 2008 LESBP Guidelines, through a process established within the 2008 Carl Moyer Program Guidelines.
- On a case-by-case basis, an air district may use AB 923 funding to replace a school bus that has a California Highway Patrol (CHP) safety certification (CHP form 292) that has lapsed in the past. Generally, the bus must have a current

[1] Assembly Bill 923, Firebaugh, Chapter 707, Statutes of 2004. Available at http://www.leginfo.ca.gov/pub/03-04/bill/asm/ab_0901-0950/ab_923_bill_20040923_chaptered.html.

CHP safety certification and the air district must make the determination that the school bus is being used regularly by the school district.

Additional Flexibility for Spending AB 923 Funds to Purchase New School Buses

In order to continue reducing the number of higher emitting buses on the road, ARB is again increasing flexibility for spending AB 923 funds to purchase a new school bus by revising thresholds set several years ago. The additions include:

- Increasing MY eligibility to MY 1993 and older buses,
- Allowing 1993 MY and older buses repowered with newer engines to be replaced, and,
- Giving Districts more discretion in determining the order in which buses may be replaced; the oldest buses do not need to be funded first. Buses with engines of MY 1993 and older would be eligible for replacement.

Clarification of "CNG" term

The 2008 LESBP Guidelines provides specific criteria for alternative-fueled replacement buses. Alternative-fueled buses may be powered by compressed or liquefied natural gas, liquefied petroleum gas (LPG or propane), electricity, methanol, ethanol fuels, fuel cells, or other advanced technologies that do not rely on diesel fuel, and has been certified by ARB. The 2008 LESBP Guidelines use the term "CNG" to discuss alternative-fueled buses. To clarify, the criteria set forth in the 2008 LESBP Guidelines for "CNG" replacement applies to all alternative-fueled buses.

Providing additional flexibility in AB 923 funding will further reduce children's exposures to Particulate Matter and Oxides of Nitrogen emissions and prevent many of the associated health effects.

If you have questions regarding this mail-out, please contact Janet Page, Air Pollution Specialist, at (916) 324-1988 or via email at jpage@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross
Mobile Source Control Division

cc: Janet Page
Air Pollution Specialist
Mobile Source Control Division

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 www.arb.ca.gov

Linda S. Adams
Acting Secretary for Environmental Protection

Edmund G. Brown Jr.
Governor

January 26, 2011 Mail-Out #MSC 11-02

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM MAIL-OUT 11-02—2011 MODEL YEAR EMISSION STANDARDS REQUIRED FOR PROGRAM FUNDING

This mail-out provides guidance to air districts and public school districts participating in the Lower-Emission School Bus Program (LESBP) regarding the emission criteria that replacement school bus contracts need to meet in Calendar Year 2011 to qualify for funding.

2011 Model Year (MY) Replacement Bus Emission Criteria

Air Resources Board set more stringent emission standards for 2007 MY and newer heavy-duty diesel engines when the LESBP 2008 Guidelines were approved. For the LESBP, this translated into emission criteria of 1.44 grams per brake horsepower/hour (g/bhp-hr) Oxides of Nitrogen (NOx) and 0.01 g/bhp-hr particulate matter (PM) for 2007-2009 MY school buses and 0.2 g/bhp-hr NOx and 0.01 g/bhp-hr PM for 2010 MY school buses.

Due to the limited number of MY 2010 school buses that were being manufactured and certified at or below the 0.2 g/bhp-hr NOx emission levels, the NOx emission criteria for replacement school buses being funded through the LESBP was changed to 0.50 g/bhp-hr for the NOx family emission limit (FEL) and the NOx + Non-methane Hydrocarbons FEL during the March 2010 Board meeting. This change was for the NOx emission standard ONLY; the PM requirement of 0.01 g/bhp-hr is still in effect and has not changed.

ARB staff has reviewed executive orders for 2011 MY school bus engines and determined most manufacturers will continue to utilize current engines in Calendar Year 2011. Therefore, the emission criteria for replacement school buses being funded through the LESBP will remain unchanged - 0.50 g/bhp-hr for the NOx FEL and 0.01 g/bhp-hr PM for Calendar Year 2011.

This information will continue to be evaluated and updated at the staff level by the end of the first quarter of each year. If you have questions regarding this mail-out, please contact Ms. Janet Page, Air Pollution Specialist, at (916) 324-1988 or via email at jpage@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

cc: Janet Page
Air Pollution Specialist
Planning and Regulatory Development Section

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 • www.arb.ca.gov

Linda S. Adams
Acting Secretary for Environmental Protection

Edmund G. Brown Jr.
Governor

DATE: May 25, 2011 Mail-Out #MSC 11-16

TO: All Interested Parties

SUBJECT: LOWER-EMISSION SCHOOL BUS PROGRAM --- 2008 GUIDELINE REVISIONS

This Mail-Out provides guidance to air districts and public school districts participating in the Lower-Emission School Bus Program (LESBP). It is intended to assist in expediting the replacement of school buses by clarifying the 2008 LESBP Guidelines and Mail-Outs regarding school bus equipment options, eligible school buses, California Highway Patrol (CHP) safety certification documentation, and school bus dismantling requirements.

Equipment Option Considerations

Air Resources Board (ARB) considered the following issues when revising Mail-Out #MSC 09-18 (LESBP School Bus Equipment Options):

Does the equipment option already exist on the California Approved Bid (CAB) base bus as standard equipment? School bus standard equipment packages are updated by the bus manufacturers and reflect all necessary requirements to meet safety requirements. ARB is not requiring school districts to remove any options that come as standard equipment on the CAB. Special needs buses have more strenuous safety standards and some additional options may be required.

Does the CHP require (not recommend) a particular option because of geographic considerations? Specific geographic areas may necessitate non-emission related equipment such as transmission retarders and automatic tire chains. These options are currently allowed with justification under Mail-Out #MSC 09-18.

Can customer preference options be funded? The LESBP funds are provided to achieve emission reductions and funds are limited. Therefore, customer preference options will not be funded.

Eligible Equipment Options

The LESBP cost cap of $140,000 for a replacement school bus remains. This cost cap is applicable to the cost of the replacement bus only and includes sales tax. Additional funding is available for infrastructure to support alternative-fueled and hybrid-electric

school buses. For the replacement of 1977-1986 model year buses, school districts must pay a $25,000 match per bus; however, this match requirement may be paid by the local air district from eligible funding sources such as Assembly Bill (AB) 2766 or AB 923 funds.

The table below identifies options that can be paid for with LESBP funds with written justification and replaces Tables 1 & 2 in Mail-Out #MSC 09-18 so long as funding from State LESBP funds does not exceed $140,000:

Options that **can** be paid for with LESBP funds with written justification
• Transmission Retarder • Air Conditioning • Automatic Tire Chains • Fog and strobe lights • 3 point Student Safety Seats

Written justification must be retained in the local air district's project file and adhere to one or more of the following:
• The bus to be replaced (old bus) is equipped with this option
• It is common/consistent with the fleet
• It is required for safety
• It is necessary for the bus route

No additional options will be considered for funding.

Eligible School Buses

Staff has received inquiries as to whether or not full sized buses may be replaced with smaller, special needs buses due to changing needs and emissions benefits. The LESBP Guidelines do not dictate that buses must be replaced with buses of the same weight class or category only that the old bus and replacement bus must have a Gross Vehicle Weight Rating (GVWR) of 14,001 pounds or greater. Therefore, school districts may replace full sized buses with smaller special needs buses using LESBP funds.

CHP Safety Certification Documentation

The 2008 LESBP Guidelines were adopted in March of 2008 and require that an application for school bus replacement funding have a current and continuous CHP safety certification (CHP form 292 - Inspection Approval Certificate) as of December 31, 2005. This requirement was established to ensure unused buses were not revived in order to get funding.

To ensure feasible eligibility requirements while maintaining assurances that funds are provided to buses in continuous service, school buses identified for replacement must have a current CHP safety certification and the two previous years of certifications.

Program advisory 08-002, http://www.arb.ca.gov/bonds/schoolbus/advisory/adv08-002.pdf provides flexibility in the types of continuous safety certification documentation that are acceptable for program eligibility. Mail-Out #MSC10-19, http://www.arb.ca.gov/msprog/mailouts/msc1019/msc1019.pdf clarifies safety certification documentation options when buses have certification gaps or operational issues. These processes are still in effect.

Clarification of Dismantling Requirements

All school buses replaced under the LESBP must be dismantled in accordance with the definition of "dismantle" as described in the LESBP Guidelines: "To punch, crush, stamp, hammer, shred, or otherwise render permanently and irreversibly incapable of functioning as originally intended, any vehicle or vehicle part." In addition, the LESBP Guidelines require that school districts ensure that the old school bus is dismantled within 60 days of the receipt of the new, replacement bus and that proof of dismantling (DMV Dismantlers Notice of Acquisition/Report of Vehicle to be Dismantled - REG 42) of the replaced vehicle be provided before payment is made by the implementing agency.

Several case-by-case (CBC) determination requests have been submitted to ARB regarding dismantle requirements of the old school bus. A CBC determination is no longer necessary for the following:

- Dismantling is not required within 60 days if documentation shows that the old bus was not driven after delivery of the new replacement bus;
- A copy of the Department of Motor Vehicles (DMV) customer receipt issued to the dismantler can be accepted as dismantle documentation in lieu of the REG 42 form indicating that the bus was junked as long as it is issued within 60-days of receipt of the new bus;
- The old bus does not have to be dismantled if it is utilized for training exercises by the local fire department. An original letter signed by the school district's authorized signatory and the fire department's chief stating the bus was donated must be submitted to the air district along with the DMV title/registration noting the bus was junked or non-revivable.

If you have questions regarding this Mail-Out, please contact Ms. Janet Page, Air Pollution Specialist, at (916) 324-1988 or via email at jpage@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross
Mobile Source Control Division

cc: Janet Page
Air Pollution Specialist
Planning and Regulatory Development Section

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

DATE: August 16, 2011 Mail-Out #MSC 11-27

TO: All Interested Parties

SUBJECT: THE LOWER-EMISSION SCHOOL BUS PROGRAM – RETROFIT ELIGIBILITY

This mail-out provides guidance to school districts that may be considering retrofitting their school buses with funding from the Lower-Emission School Bus Program (LESBP).

Background

The 2008 LESBP Guidelines state (page 20) "All 1987 and eligible newer model year (MY) in-use diesel-fueled buses with current California Highway Patrol (CHP) safety certifications qualify for retrofits, provided there is an ARB-verified retrofit device available for the engine." This mail-out revises the Guidelines for retrofit funding eligibility and sets requirements in place for buses with older chassis to help ensure they remain in service for at least five years. This change will further meet the Air Resources Board (ARB) commitment of protecting children from the harmful effects of air pollution, while providing additional flexibility to school districts.

Retrofit Eligibility Now Based on Engine MY Not Bus MY

Because achieving emission benefits greatly depends on the MY of the engine, ARB is changing retrofit project eligibility with this mail-out. Retrofit eligibility will now be based on the MY of the engine and not the MY of the bus chassis. Therefore, all diesel school buses with 1987 and newer MY engines now qualify for funding if all other requirements are met.

Requirements for Retrofitting School Buses with Chassis 30+ Years Old

In addition, ARB has concerns with installing retrofits on chassis 30 years or older, as 30 years is the standard useful life of a bus. ARB recognizes it is common practice for school districts to repower 1987 and older MY buses with newer engines as this may be the most cost-effective option of extending the service of an older bus. However, to help ensure the

bus remains in service through the required five year project life additional requirements are included.

Below are the requirements for retrofitting a bus with a chassis that is 30 years or older.

- Older bus chassis may have structural integrity issues. Documentation is required confirming that the chassis is in good working order and will last through the five year project life. This includes a dealer or district engineer inspection with a subsequent report to the air district substantiating that the chassis is structurally sound, and will remain in service for five additional years.
- Language must be included in the contract that stipulates that the chassis must operate for the length of the project life or a pro-rated amount will be returned to the air district.
- Air districts may seek a case-by-case determination in lieu of the preceding and must provide documentation that is sufficient to demonstrate that the chassis will last through the project life.
- All other eligibility requirements remain including CHP safety certification, cost caps, five year project life, and ARB-verified level 3 diesel emission control device executive order.

If you have questions regarding this Mail-Out, please contact Ms. Janet Page, Air Pollution Specialist, at (916) 324-1988 or via email at jpage@arb.ca.gov.

Sincerely,

/s/

Robert H. Cross
Mobile Source Control Division

cc: Janet Page
Air Pollution Specialist
Planning and Regulatory Development Section

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

October 11, 2011 Mail-Out #MSC 11-31

TO: All Interested Parties

SUBJECT: ADMINISTRATIVE CLARIFICATIONS FOR INCENTIVE PROGRAMS: DIESEL PARTICULATE FILTERS THAT MUST BE REPLACED OR FOR WHICH SALES HAVE BEEN SUSPENDED BY THE MANUFACTURER

Background
California Air Resources Board (ARB) awards funds through a variety of its incentive programs to encourage individuals and organizations to voluntarily install particulate-reducing retrofit devices on on-road and off-road diesel vehicles. The sources for such incentive funds include the Carl Moyer Memorial Air Quality Standards Attainment Program (Moyer Program), the Lower-Emission School Bus Program (School Bus Program), the Proposition 1B Goods Movement Emission Reduction Program (Goods Movement Program), the AB 118 Air Quality Improvement Program (AQIP), Providing Loan Assistance for California Equipment (PLACE) Program, and associated local match funds.

This mail-out clarifies administrative actions that should be taken if a retrofit manufacturer issues a notice requiring removal of a retrofit from a grantee's vehicle. Further, this mail-out clarifies available options for projects that have not yet been completed and for which sales and installations of the planned retrofit have become suspended as part of the manufacturer's notice. For the most part, the options listed below are based on existing incentive program guideline and contract provisions.

Scenario 1: The application to install the retrofit has been approved, but a contract to install the retrofit has not been executed.

Contracts not fully executed shall not proceed, but instead should be suspended or rewritten to cover any changes to the project.

The implementing agency should notify each applicant and work with the applicant to identify a solution. The implementing agency and applicant must suspend contract execution until the retrofit becomes available again, or choose an alternative retrofit system, and vehicle if necessary. If an alternative retrofit is selected, the contract for the project must reflect the retrofit that is ultimately installed.

If no retrofit is selected for the project, the approval for the application must be withdrawn. If the application covers more than just a retrofit (e.g., includes a repower), the application must be withdrawn or reevaluated for eligibility (e.g., for the repower alone, without a retrofit).

Scenario 2: The contract for the retrofit has been executed, but the retrofit has not yet been installed.

The implementing agency should notify each grantee and work with the grantee to identify a solution that best fulfills the contract requirements within the contract's time frame. If the best solution is to select an alternative retrofit system and/or vehicle, the contract must be amended to reflect the retrofit actually installed. If the best solution is to allow the manufacturer some time to offer a suitable substitute filter, the contract may need to be amended to extend the project timeline. This can be done as long as the extended timeline is consistent with requirements under the incentive program guidelines, including preclusions from overlapping with applicable rule implementation compliance dates.

If there is no viable solution that ensures that the project still meets incentive program requirements, the contract must be cancelled, or the contract must be amended to remove the grant for the retrofit.

Scenario 3: The retrofit under contract has already been installed but the grantee has not yet been reimbursed by the implementing agency.

The implementing agency should reimburse the grantee for the expenses incurred, consistent with the payment requirements of the incentive program guidelines. The grantee should then be treated the same as other grantees under scenario four below.

Scenario 4: The retrofit under contract has been installed and reimbursement has been made by the implementing agency to the grantee, but the retrofit must now be removed.

The implementing agency should contact each grantee and work with the grantee to identify a solution that best fulfills the contract requirements within the contract's time frame. The contract with the grantee must contain provisions for non-performing projects, which should be followed while acknowledging that the cause of the non-performance is outside of the grantee's control.

If the administrative remedies available under the contract fail to adequately address the situation, the implementing agency should contact ARB and seek a case-by-case determination.

The following considerations apply to this scenario:

- The implementing agency must address any time period greater than 90 days for which the grantee is not able to achieve contracted emission reductions (e.g., due to removal of the retrofit and reinstallation of an upgraded retrofit by the manufacturer at a much later date, or due to the grantee deciding not to install a second retrofit after the manufacturer orders the removal of the first one). For example, in the Carl Moyer Program, the implementation guidelines allow actions that include granting a waiver without penalty, extending the contract's timeline, requiring the grantee to return an amount of grant funds in proportion to the loss in emission reductions, and recalculating the cost-effectiveness of the project.

- The implementing agency must address any change in the project specifications versus what is listed in the project's contract and reflected in the post-inspection. In most cases, this means that the contract will have to be amended and a new post-inspection conducted if the grantee replaces the removed retrofit with another verified retrofit. In the case of school buses, the California Highway Patrol (CHP) must inspect the buses after any modification and prior to transporting students.

- The implementing agency must address financial discrepancies between what was originally paid toward the project and what the grantee ultimately paid. For example, if the manufacturer refunds the purchase price to the grantee, who then purchases a more expensive - but eligible and cost-effective - retrofit, the implementing agency may cover this additional expense so long as it makes the appropriate contract amendments and receives a detailed invoice consistent with incentive guidelines, and the cumulative cost of the project meets guideline requirements including any limit to funding amounts. If the grantee purchases a less expensive retrofit, the district must require a refund of the cost difference.

Scenario 5: The retrofit was purchased though a voucher program (e.g., VIP)

Any unredeemed voucher for a retrofit for which sales have been suspended shall be immediately voided. The participant may reapply for a new voucher for another verified retrofit.

For retrofits already installed through a voucher program for which the voucher term is still in effect, ARB and the implementing agency shall identify the affected vehicles, contact their owners, and outline appropriate actions the owner must take. ARB will develop any necessary materials to send to each participant such as a template letter that includes detailed instructions.

This clarification is effective immediately.

If you have any questions or need further clarification, appropriate contacts for each incentive program are listed on ARB's incentives program website at http://www.arb.ca.gov/ba/fininfo.htm. Air districts may also contact their appropriate ARB incentive program liaison.

For information regarding fleet rule compliance please refer to Regulatory Advisory Mail-Out #MSCD 11-29 which provides detailed information on what vehicle owners and operators should do next.

Sincerely,

/s/

Robert H. Cross, Chief
Mobile Source Control Division

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

DATE: December 20, 2011 Mail-Out #MSC 11- 37

TO: All Interested Parties

SUBJECT: THE LOWER-EMISSION SCHOOL BUS PROGRAM – GUIDELINE REVISIONS

This Mail-Out provides guidance to air districts and public school districts participating in the Lower-Emission School Bus Program (LESBP). It is intended to incorporate recently chaptered legislation, Assembly Bill (AB) 462 (Lowenthal) and AB 470 (Halderman), provide the emission criteria for Calendar Year 2012 replacement contracts, clarify tracking and reporting requirements of earned interest, clarify cost-caps, and correct School Bus Program Advisory 08-001.

These changes and clarifications are being made via mail-out under the authority granted by the Board during the March 25, 2010 board hearing.

Expanded Funding Opportunities for AB 923 Projects – Effective January 1, 2012

Effective January 1, 2012, AB 462 and AB 470 authorizes the $2 Department of Motor Vehicles (DMV) fee collected through AB 923 to be used to fund three new project categories: natural gas fuel tank replacements, refueling infrastructure maintenance, and school bus retrofit projects. AB 462 and AB 470 require the new funding sources to be implemented pursuant to the LESBP. Therefore this mail-out is being issued to implement these changes and specifies the criteria for the new categories.

These three new project categories are an addition to the following existing four clean air projects allowed to be funded with AB 923 $2 DMV fees:

- Projects eligible for grants under the Carl Moyer Memorial Air Quality Standards Attainment Program.
- New purchase of school buses pursuant to the LESBP.
- New purchase, retrofit, repower, or add-on of equipment for previously unregulated agricultural sources of air pollution.
- Accelerated vehicle retirement or repair program.

Criteria for On-Board Natural Gas Tank Replacements Funded with AB 923 funds:

The Department of Transportation requires on-board compressed natural gas (CNG) tanks to be inspected by the California Highway Patrol (CHP) every three years or 36,000 miles. These tanks are typically replaced at the end of the manufacturer's service life, which is approximately 15 years.

Recently chaptered AB 462 authorizes local air districts to utilize AB 923 funds to pay for the replacement of on-board natural gas fuel tanks that are on school buses 14 years or older and owned by a public school district. Criteria for these projects are as follows:

- Air districts must meet all administrative requirements, such as those pertaining to contracting, reporting, invoicing, tracking administrative costs, and records retention as outlined in the 2008 LESBP Guidelines. Air districts may use up to five percent of funds for administration. In addition, because these are local funds, air districts may impose more stringent requirements on these projects.
- The maximum funding amount per school bus cannot exceed $20,000.
- School buses must be at least 14 years old but no older than 16 years to receive funding. Because the service life for most school buses is 30 years and tank life is 15 years, this requirement will ensure funding does not extend the life of a school bus beyond the service life.
- School districts must provide documentation of tank expiration dates, serial numbers, and inspection dates of tanks to be replaced. Tank replacement requests may be accepted by the air district within 18 months of their expiration dates in order for the contract process to begin.
- Public school districts are eligible for funding.
- Where a Joint Power Authorities (JPA) has been formed by several public school districts, and the JPA holds ownership of the school buses, then the JPA is also eligible to participate and must fulfill school district requirements as listed.
- School districts must demonstrate bus ownership.
- School districts must provide vendor quotes for the cost of new tank replacement(s) and commit to owning and operating the bus a minimum of 5 years.
- Once a tank is replaced, school districts must submit a copy of the CHP safety inspection report (CHP forms 292, 343, 343A, and others), photos of the new tank labels on the school bus and an invoice to the air district in order to be reimbursed. The CHP requires inspection of the bus prior to it returning to service when a chassis modification occurs.

Criteria for Infrastructure Improvements of Deteriorating Natural Gas Fueling Dispensers Funded with AB 923 Funds:

The 2008 LESBP Guidelines allow ten percent of new CNG bus funding to be used for refueling infrastructure when no local refueling is available or the existing refueling site is

inadequate. AB 462 authorizes funding to pay for improvements of deteriorating natural gas fueling dispensers operated by a public school district. Criteria for these projects are as follows:

- Air districts must meet all administrative requirements, such as those pertaining to contracting, reporting, invoicing, tracking administrative costs, and records retention as outlined in the 2008 LESBP Guidelines. Air districts may use up to five percent of funds for administration. In addition, because these are local funds, air districts may impose more stringent requirements on these projects.
- Air districts have the option of developing a voucher or rebate program for dispenser improvements. However, Air Resources Board (ARB) staff must review and approve the program prior to implementation.
- Public school districts that operate natural gas fueling infrastructure are eligible for funding.
- Where a JPA has been formed by several public school districts, and the JPA holds ownership of the school buses, then the JPA is also eligible to participate and must fulfill school district requirements as listed.
- School districts may only request one-time funding amounts not to exceed $500 per dispenser.
- School districts must document that buses in their fleet use the natural gas fueling station and document the fueling station's deterioration. This may be accomplished with photos and copies of inspection reports by fueling station personnel.
- School districts must provide vendor quotes for the cost of repairing or making improvements to fueling dispenser infrastructure.
- School districts must submit a cover letter confirming the repairs or improvements were completed along with the invoice to the air district in order to be reimbursed.

<u>Criteria for Retrofits Funded with AB 923 Funds:</u>

AB 470 authorizes AB 923 funding to pay for retrofitting of emissions control equipment for existing school buses pursuant to the LESBP. Existing retrofit project criteria in Chapter IV of the 2008 LESBP Guidelines and subsequent Mail-Outs contain the requirements that apply to these projects. The administrative cap for AB 923 funded retrofits is capped at five percent.

2012 Model Year (MY) Replacement Bus Emission Criteria - Effective January 1, 2012 to December 31, 2012

When the LESBP 2008 Guidelines were approved emission criteria for replacement vehicles were included. Emission criteria for 2010 and newer model year school buses were required to meet the 0.2 grams per brake horsepower-hour (g/bhp-hr) oxides of nitrogen (NOx) and 0.01 g/bhp-hr particulate matter (PM) standards.

Due to the limited number of MY 2010 school buses that were being manufactured and certified at or below the 0.2 g/bhp-hr NOx emission levels, the NOx emission criteria for replacement school buses being funded through the LESBP was changed to 0.50 g/bhp-hr for the NOx family emission limit (FEL) and the NOx + Non-methane Hydrocarbons FEL during the March 2010 Board meeting. This change was for the NOx emission standard ONLY; the PM requirement of 0.01 g/bhp-hr is still in effect and has not changed. This change allowed continued funding for the cleanest school buses available.

Staff was also directed to review this requirement annually and adjust it accordingly. As such, ARB staff has reviewed executive orders for 2012 MY school bus engines and determined manufacturers will continue to utilize current engines in Calendar Year 2012. Therefore, the emission criteria for replacement school buses being funded through the LESBP will remain unchanged - 0.50 g/bhp-hr for NOx FEL and 0.01 g/bhp-hr PM for contracts executed through calendar year 2012.

This information will continue to be evaluated and updated each year.

Clarification of Existing Requirements – Effective Immediately

The following section provides clarification as requested by stakeholders regarding earned interest and cost caps.

<u>Tracking and Reporting Earned Interest:</u>

Interest must be spent within the same parameters of the source of funds upon which the interest was earned. Air districts that are implementing agencies are required to calculate and report earned interest to the ARB on each semi-annual report. Section Q. 3 of Chapter V of the 2008 LESBP Guidelines gives detailed guidance for calculating, tracking, and expending earned interest. Earned interest and interest expenditures are reported in the appropriate fields of the LESBP database.

During the past two years, the LESBP received approximately $196 million in funding from six bond installments under Proposition 1B. Regardless of the funding source, interest must be fully expended by June 30, 2012, or be returned to the ARB within 60 days of the deadline.

Below is a list of each installment of bond funding, the dates of the installment, and a brief description of the restrictions associated with each.

- The 1st installment of $12 million was issued on April 2, 2009 for disbursements made to local air districts prior to December 2008. Expenditures are not subject to additional restrictions beyond those already in the 2008 LESBP Guidelines;

- The 2nd installment of $71.1 million was issued on April 28, 2009. As outlined in Mail-Out #MSC 09-24, these are Build America Bond (BAB) funds that do not allow expenditures for contracts for services associated with the maintenance of retrofit devices and do not allow expenditures for administration costs;
- The 3rd installment of approximately $56.7 million was issued on October 15, 2009. As outlined in Mail-Out #MSC 10-11, these are BAB funds and do not allow expenditures for contracts for services associated with the maintenance of retrofit devices and do not allow expenditures for administrative costs;
- The 4th installment of $283,700 was also issued on October 15, 2009. As outlined in Mail-Out #MSC 10-11, these funds may only be used for administrative costs, and not project costs;
- The 5th installment of approximately $44.5 million was issued on March 18, 2010. As outlined in Mail-Out #MSC 10-36, these bond funds are subject to the restrictions in the 2008 LESBP Guidelines;
- The 6th installment of approximately $9.9 million was issued on April 1, 2010. As outlined in Mail-Out #MSC 10-36, these are BAB funds and as with the previous BAB funds, do not allow expenditures for contracts for services associated with the maintenance of retrofit devices and do not allow expenditures for administration costs.

<u>Cost caps for school bus replacements using various fuel types:</u>

Stakeholders have requested review and clarification of the cost caps for replacement school buses using various fuel types.

Section D of Chapter III of the 2008 LESBP Guidelines sets a cost cap of $140,000 to replace a school bus with State program funds. To maximize the use of State funds, school districts are required to provide $25,000 in match funding when replacing eligible middle aged (1977-1986 MY) school buses; match funding is not required when replacing pre-1977 MY buses. Local funds, such as those generated by AB 923 or AB 2766, can be used to assist school districts with the match funding requirement.

Alternative-fueled buses, as defined in Mail-Out MSC# 10-45, may be powered by compressed or liquefied natural gas, liquefied petroleum gas (LPG or propane), electricity, methanol, ethanol fuels, fuel cells, or other advanced technologies that do not rely on diesel fuel. Section E of Chapter III of the Guidelines state: “Eligible air district funds can be also used to offset the higher cost of advanced technologies, such as hybrid-electric and alternative-fueled buses, if the cost for those buses exceeds the total of the cost cap and matching funds.” This allows the district to fund an alternative-fueled bus over $165,000 using AB 923 funds. ARB would like to further clarify that, for the purchase of an alternative-fueled bus, as described above, regardless of the funding source (AB 923, etc.), there is no cap on the amount of funds that may be used to augment the maximum of $140,000 in Proposition 1B funds.

For diesel-fueled buses, Section E of Chapter V of the Guidelines state: “AB 923 funds may be used to meet the match funding requirement for replacing 1977-1986 model year buses. If an air district uses AB 923 funds as the primary source of funding to replace a 1977-1986 model year bus, the air district may also cover the match funding requirement with AB 923 funds.” This allows the air district to fund up to $165,000 for a diesel-fueled bus ($140,000 cost cap + $25,000 match funds) using AB 923 funds or a combination of AB 923 funds ($25,000) and Proposition 1B funds ($140,000).

Therefore, regardless of the fuel type a school bus uses, a maximum of $140,000 in Proposition 1B funds may pay for a new replacement bus. A summary of the cost caps for buses using various fuel types is presented in the LESBP Cost Caps Table on the following page.

LESBP Cost Caps Table:

The following table clarifies the various cost caps for all project types funded pursuant to the LESBP.

LESBP Cost Caps

Project Type	Maximum Proposition 1B Funds	Proposition 1B Funds combined with AB 923 Funds	Maximum AB 923 Funds
Diesel-Fueled Bus Replacement	$140,000	$165,000	$165,000
Alternative-Fueled Bus Replacement [1]	$140,000	No cap	No cap
Diesel Retrofit Project per Bus	$20,000	$20,000	$20,000
Diesel Retrofit Maintenance – includes purchase of a cleaning device system or paying for filters to be cleaned with a service contract	$2,500 within the $20,000 retrofit cap	$2,500 within the $20,000 retrofit cap	$2,500 within the $20,000 retrofit cap
Diesel Retrofit Infra-structure – includes electrical outlets necessary for regeneration of active retrofit systems	No cap on infrastructure, but must be within the $20,000 retrofit cap	No cap on infrastructure, but must be within the $20,000 retrofit cap	No cap on infrastructure, but must be within the $20,000 retrofit cap
Diesel Retrofit Data logging	$300 within the $20,000 retrofit cap	$300 within the $20,000 retrofit cap	$300 within the $20,000 retrofit cap
Alternative Fuel Infrastructure for alternative-fueled bus replacements	$14,000	$14,000	$14,000
On-board Natural Gas Tank Replacements	$0	$0	$20,000 per bus
Fueling Dispenser Improvements	$0	$0	$500 per dispenser

[1] In addition to these funds, Hybrid Voucher Incentive Project (HVIP) funding may be available. See the program's website for details: http://www.californiahvip.org/

Correction of School Bus Program Advisory 08-001 – Effective Immediately

Advisory 08-001: "Documentation of Compressed Natural Gas (CNG) Fueling Station and Active Retrofit Devices Infrastructure Expenditures", contained a typographical error and is corrected to read:

2. School Bus Infrastructure for Active Retrofit Devices

Within the $20,000 retrofit funding cap, air districts may allocate funding for infrastructure (such as additional electrical outlets) needed to accommodate active retrofit devices. This funding is separate from the $2,500 allocation for diesel particulate filter (DPF) maintenance.

Air districts shall retain following documents for infrastructure costs funded with State program funds.

- Application (can be the same as for the active retrofit devices but includes a section addressing the need for infrastructure funding)
- ~~Documentation for alternative-fuel infrastructure must state:~~
  - ~~the current infrastructure (number of outlets) on-site~~
  - ~~the number of vehicles that use the infrastructure~~
- Resolution from the school district governing board (or other documentation signed by a duly authorized official) authorizing the submittal of the application and identifying the individual authorized to implement the retrofit project.
- Vendor quotes
- Executed contracts
- Copy of the purchase order
- Invoice(s)
- Proof of payment (i.e. a photo copy of the check)

If you have questions regarding this Mail-Out, please contact Ms. Janet Page, Air Pollution Specialist, at (916) 324-1988 or via email at jpage@arb.ca.gov.

Sincerely,

\s\

Robert H. Cross, Chief
Mobile Source Control Division

cc: See next page

cc: Janet Page
Planning and Regulatory Development Section

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

DATE: August 9, 2012 Mail-Out #MSC 12-15

TO: All Interested Parties

SUBJECT: THE LOWER-EMISSION SCHOOL BUS PROGRAM – EXPENDITURE DEADLINE EXTENSION AND MOVEMENT OF FUNDS

This Mail-Out incorporates recent budget language into the 2008 Lower-Emission School Bus Program (LESBP) Guidelines that 1) extends the LESBP portion of the Proposition 1B (the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006) funds expenditure deadline by 2 years and 2) allows LESBP bond funds to be transferred from one air district to another air district. This language is found in Senate Bill 1018, Chapter 39, Statutes of 2012 (SB 1018) and was jointly proposed by the California Air Pollution Control Officers Association and the Air Resourced Board (ARB) because unspent principal remained in about 20 air districts as of February 2012. The statute allows ARB to work cooperatively with local air districts to continue to pay for eligible public school bus replacements or retrofits in regions of California with the most polluting school buses and the greatest need for funding.

Expenditure Deadline

SB 1018 extends the LESBP expenditure deadline from June 30, 2012, to June 30, 2014, to allow time for all funds to be spent on cleaning up California's school bus fleet thereby protecting children's health from the harmful effects of air pollution.

Transfer of Funds

Unspent LESBP Proposition 1B funds, including accrued interest, that are not committed by an executed contract by June 30, 2012, are subject to transfer to another local air district that demonstrates an ability to fully expend (liquidate) funds by January 1, 2014 (Health and Safety Code 44299.91, (e) - (h)). ARB requested that each implementing air district report the amount of uncommitted funds as of June 30, 2012. ARB is working with the air districts - those with unspent funds and those with eligible projects - to establish a list of potential recipient air districts by September 30, 2012.

Applicable air districts must transfer funds to recipient air district(s) by January 1, 2013. In addition, any unspent funds as of January 1, 2014, will be transferred to air districts with existing demand. All transferred funds must be fully expended on eligible projects

and not on administrative costs. Funds not fully expended by June 30, 2014, must be returned to ARB.

Once the list of potential recipient air districts is established, documents such as grant amendments (between ARB and some air districts), memoranda of understanding (MOU), and board resolutions may need to be executed to allow the flexibility provided by SB 1018 for air districts transferring funds, receiving funds, or extending the expenditure deadline to June 30, 2014. Enclosed is the Lower-Emission School Bus Program Redirection of Funds to Another Air District form, to be completed and returned to ARB along with the necessary board resolutions and MOUs.

Air districts utilizing SB 1018 must mail copies of all applicable documents to ARB at:

California Air Resources Board
Mobile Source Control Division
Lower-Emission School Bus Program
Post Office Box 2815
Sacramento, California 95812

If you have questions regarding this Mail-Out, please contact Ms. Lisa Jennings, Air Pollution Specialist, at (916) 322-6913 or via email at ljenning@arb.ca.gov .

Sincerely,

/s/

Robert H. Cross, M.S.M.E, P.E.
Chief, Mobile Source Control Division

Attachment

cc: Mr. Kenneth Koyama, Executive Director
California Air Pollution Control Officers Association
1107 Ninth Street, Suite 210
Sacramento, California 95814

Ms. Lisa Jennings
Air Pollution Specialist
Mobile Source Control Division

STATE OF CALIFORNIA
California Environmental Protection Agency
AIR RESOURCES BOARD
MSCD/ISB/LESBP-151 (NEW 8/12)

Lower-Emission School Bus Program

Redirection of Funds to Another District

1. District: _____

2. Name of district to receive the funds: _____

3. Amount of funds to transfer:

Date of Bond Fund Installment	Amount of Principal Funds	Amount of Interest	Total

- Include a resolution from your district board that authorizes the redirection of funds or authorizes the Air Pollution Control Officer to redirect funds.
- Arrange for the district that is accepting your funds to provide a board resolution to ARB that authorizes such acceptance.
- Include a Memorandum of Understanding (MOU) or equivalent that:
  - Is signed by authorized representatives of your district and the district that is receiving your funds.
  - Spells out the details and conditions of the redirection of funds.
  - Identifies which district is responsible for the required match associated with the redirected funds.
  - Identifies the bond installment and the associated expenditure deadline (June 30, 2014) of the redirected funds.
  - Spells out how and when payment will be made to the district that is receiving your funds. Once payment is made, please send a copy of the check to the address below for our records.
- Sign this form and mail it, the resolutions, and the MOU to the address below. Please also notify your liaison regarding this submittal.

4. Signature of authorized district representative:

Signature: _____ Date: _____

Printed name and title: _____

5. Mail this form and attachments to:

California Air Resources Board
MSCD
Lower-Emission School Bus Program
Post Office Box 2815
Sacramento, California 95812

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

DATE: September 25, 2012 Mail-Out #MSC 12-18

TO: All Interested Parties

SUBJECT: THE LOWER-EMISSION SCHOOL BUS PROGRAM – REVISIONS TO IMPLEMENTATION DEADLINES

This Mail-Out incorporates implementation deadline adjustments into the 2008 Lower-Emission School Bus Program Guidelines (Guidelines). Mail-Out #MSC 12-15 incorporated recent statutory changes (Senate Bill 1018, Chapter 39, Statutes of 2012) – including the extension of the expenditure deadline for Lower-Emission School Bus Program (LESBP) Proposition 1B (the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006) funds from June 30, 2012, to June 30, 2014 – into the Guidelines. Those statutory changes necessitate adjustments to the implementation deadlines that were last adjusted in Mail-Out #MSC 10-11. Accordingly, the Guidelines now require two additional years of semiannual reports; provide for a new bus delivery deadline and for liquidated damages; specify what must be accomplished by the expenditure deadline; and extend the records submission due date for those air districts that chose to meet the bond records retention requirement by submitting records to the Air Resources Board (ARB).

Key Deadlines

Future Reporting Dates

The remaining reports must be submitted (i.e., entered into the LESBP bond accountability database, printed, signed, and mailed) by the following dates:

- Seventh through tenth semiannual reports: November 1, 2012, May 1, 2013, November 1, 2013, and May 1, 2014
- Final report: November 1, 2014

Bus Delivery Deadline and Liquidated Damages

Proposition 1B-funded replacement buses must be delivered by April 1, 2014. To reflect the new bus delivery deadline, the liquidated damages will be in the amount of $100 per day per bus for each day a bus is delivered after April 1, 2014. The date that is used in liquidated damages clauses must be adjusted accordingly (see Section M of Appendix C of the Guidelines).

Final Program Deadlines

June 30, 2014 is the deadline for the following:

- All Proposition 1B LESBP funds, including earned interest, must be fully expended, that is, paid out by air districts by paying invoices associated with approved projects.
- All Proposition 1B LESBP funds, including earned interest, that are not fully expended (paid out) by this date, must be returned to ARB within 60 days of June 30, 2014.
- Contracts shall include a specified time frame in which project completion shall occur, so that the funds are fully expended by June 30, 2014 (see Section F.1 of Appendix C of the Guidelines).

35-Year Bond Records Retention Requirement

Under State and federal bond requirements, certain records must be maintained for at least 35 years. Implementing air districts have notified ARB of how they will meet the 35-year bond records retention requirement. The air districts that chose to meet the requirement by sending their records to ARB by December 31, 2012, now have until December 31, 2014 to do so.

Regardless of the option an air district chooses to meet the 35-year bond records retention requirement, the air district must still retain the records described in Appendix E of the Guidelines for the length of time set forth in that Appendix.

If you have questions regarding this Mail-Out, please contact Ms. Kimya Lambert, Air Pollution Specialist, at (916) 323-2507 or via email at klambert@arb.ca.gov .

Sincerely,

/s/

Robert H. Cross, M.S.M.E, P.E.
Chief, Mobile Source Control Division

cc: Ms. Kimya Lambert
Air Pollution Specialist
Mobile Source Control Division

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

January 22, 2013 Mail-Out #MSC 13-02

TO: All Interested Parties

SUBJECT: THE LOWER-EMISSION SCHOOL BUS PROGRAM – 2013 MODEL YEAR REPLACEMENT BUS EMISSION CRITERIA – EFFECTIVE JANUARY 1, 2013 TO DECEMBER 31, 2013

The approved 2008 Lower-Emission School Bus Program Guidelines include emission criteria for replacement vehicles. Initially, 2010 and newer model year school bus engines were required to meet the 0.20 grams per brake horsepower-hour (g/bhp-hr) oxides of nitrogen (NOx) and 0.01 g/bhp-hr particulate matter (PM) standards. However, due to the limited number of model year 2010 school buses that were manufactured and certified at or below the 0.20 g/bhp-hr NOx emission levels, the NOx emission criteria for replacement school buses was changed to 0.50 g/bhp-hr for the NOx family emission limit (FEL) and the NOx + non-methane hydrocarbons FEL during the March 2010 Board meeting. This modification was for the NOx emission standard ONLY; the PM requirement of 0.01 g/bhp-hr is still in effect and has not changed. This change allowed continued funding for the cleanest school buses available.

Air Resources Board (ARB or Board), at its March 2010 meeting, also directed staff to review the emission criteria requirement annually, and adjust it accordingly. As such, ARB staff has reviewed executive orders for 2013 model year school bus engines and determined that although some buses will be available from manufacturers at less than 0.50 g/bhp-hr NOx, a significant portion of new buses are expected to remain at 0.50 g/bhp-hr. Therefore, in order to ensure that sufficient new buses are available to replace older buses, ARB maintains the 0.50 g/bhp-hr NOx and 0.01 g/bhp-hr PM maximum emission criteria for contracts executed through calendar year 2013.

If you have questions regarding this Mail-Out, please contact Ms. Janet Page, Air Pollution Specialist, at (916) 324-1988 or via email at jpage@arb.ca.gov .

Sincerely,

/s/

Robert H. Cross, M.S.M.E, P.E.
Chief, Mobile Source Control Division

cc: Ms. Janet Page
Air Pollution Specialist
Mobile Source Control Division

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

August 30, 2013 Mail-Out #MSC 13-21

TO: All Interested Parties

SUBJECT: THE LOWER-EMISSION SCHOOL BUS PROGRAM – GUIDANCE FOR TRANSFERRING OWNERSHIP AND TERMINATING A CONTRACT FOR A GRANT-FUNDED SCHOOL BUS

This Mail-Out provides guidance to air districts and eligible school bus owners participating in the Lower-Emission School Bus Program (LESBP) regarding the sale, donation, or termination of a grant-funded project prior to completion of the contract.

Background

The LESBP Guidelines require that the implementing agency ("air district") and the eligible applicant ("school bus owner") have a contract that requires the school bus owner to own and operate the grant-funded school bus (retrofitted or replaced) for a period of five years. However, air districts are requesting guidance regarding transfer of ownership or termination of a project for grant-funded school buses prior to completing the ownership and operation time period required by contract. Occasionally, ownership of school buses may need to change to accommodate fluctuations in student populations, ridership, school bus routes, walking distances, and school closures. For example, school districts have made requests to air districts to donate grant-funded school buses, sell grant-funded school buses, and also to terminate contracts for grant-funded retrofits to obtain replacement funding for the school bus.

Guidance on minimum requirements is provided below regarding transferring ownership of a grant-funded school bus prior to the end of the contract and terminating a grant-funded school bus contract.

Transferring Ownership of a Grant-Funded School Bus Prior to End of Contract

1. The new owner of the grant-funded school bus must meet the requirements for an eligible applicant as described in the LESBP guidelines.

2. Ownership of the grant-funded school bus must be transferred to the new owner. Whether the grant-funded school bus is donated or sold, the registration must be in the new owner's name.

3. The air district must include documentation of the transfer of ownership in the file and establish a contract with the new school bus owner. At a minimum, the contract term with the new owner must be five years minus the time the original owner owned and operated the grant-funded school bus. However, air districts may require a longer contract term and require all or part of the grant funding returned.

4. A copy of the check for any returned funds from the owner of the grant-funded school bus must be maintained in the air district's project file, documenting the amount of funds returned.

5. Funds returned to the air district must be spent on eligible projects, or in the case of funds with expenditure deadlines, returned to the Air Resources Board (ARB) if not expended by the deadline.

6. The grant-funded school bus must remain in California. The new owner does not have to be in the same air district as the previous owner.

7. A case-by-case request must be made by the air district to ARB if the transfer of ownership does not meet the minimum requirements described above.

Note: If a grantee chooses to sell a school bus, the purchaser must be advised that credit for in-use regulation compliance only occurs if a diesel emission control system is in its original verified configuration as installed. Other credits and waivers may not be transferrable.

<u>Terminating a Grant-Funded School Bus Contract</u>

1. The owner of the grant-funded school bus must return to the air district all or a prorated amount of the grant funding for a school bus that will not meet the ownership and operation time period required by contract.

2. The air district must include documentation of the termination of the contract in the file and require all or part of the grant funding returned.

3. A copy of the check for any returned funds from the owner of the grant-funded school bus must be maintained in the air district's project file, documenting the amount of funds returned.

4. Funds returned to the air district must be spent on eligible projects, or in the case of funds with expenditure deadlines, returned to ARB if not expended by the expenditure deadline.

5. In the case of school bus owners that terminate Proposition 1B-funded retrofit contracts to become eligible for replacement funding, no Proposition 1B funds can be used to replace the school bus.

6. In the case of school bus owners that terminate retrofit contracts to obtain replacement funding for the school bus prior to dismantling the school bus, re-designation of the retrofit device to another vehicle in the fleet is encouraged. To re-designate a retrofit device, the retrofit manufacturer must have a re-designation policy approved by ARB (http://www.arb.ca.gov/diesel/verdev/swap/swap.htm) and the re-designation must be approved by the retrofit device manufacturer.

7. A case-by-case request must be made by the air district to ARB if the termination of the project does not meet the guidance described above.

If you have questions regarding this Mail-Out, please contact Ms. Lisa Jennings, Air Pollution Specialist, at (916) 322-6913 or via email at ljenning@arb.ca.gov .

Sincerely,

/s/

Annette Hebert, Chief
Mobile Source Control Division

cc: Ms. Lisa Jennings
Air Pollution Specialist
Mobile Source Control Division

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

December 27, 2013 Mail-Out #MSC 13-33

TO: All Interested Parties

SUBJECT: THE LOWER-EMISSION SCHOOL BUS PROGRAM – REPLACEMENT BUS EMISSION CRITERIA – EFFECTIVE JANUARY 1, 2014 TO DECEMBER 31, 2014

The approved 2008 Lower-Emission School Bus Program Guidelines include emission criteria for replacement vehicles. Initially, 2010 and newer model year school bus engines were required to meet the 0.20 gram per brake horsepower-hour (g/bhp-hr) oxides of nitrogen (NO_x) and 0.01 g/bhp-hr particulate matter (PM) standards. However, due to the limited number of model year 2010 school buses that were manufactured and certified at or below the 0.20 g/bhp-hr NO_x emission levels, the NO_x emission criteria for replacement school buses was changed to 0.50 g/bhp-hr for the NO_x family emission limit (FEL) and the NO_x + non-methane hydrocarbons FEL during the March 2010 Board meeting. This modification was for the NO_x emission standard ONLY; the PM requirement of 0.01 g/bhp-hr is still in effect and has not changed. This change allowed continued funding for the cleanest school buses available.

The Air Resources Board (ARB or Board), at its March 2010 meeting, also directed staff to review the emission criteria requirement annually, and adjust it accordingly. As such, ARB staff has reviewed executive orders for 2013 and 2014 model year school bus engines and determined that although some buses will be available from manufacturers at less than 0.50 g/bhp-hr NO_x, a significant portion of new buses are expected to remain at 0.50 g/bhp-hr. Therefore, in order to ensure that sufficient new buses are available to replace older buses, ARB maintains the 0.50 g/bhp-hr NO_x and 0.01 g/bhp-hr PM maximum emission criteria for contracts executed through calendar year 2014.

If you have questions regarding this Mail-Out, please contact Ms. Kimya Lambert, Air Pollution Specialist, at (916) 323-2507 or via email at klambert@arb.ca.gov .

Sincerely,

/s/

Erik White, Chief
Mobile Source Control Division

cc: Ms. Kimya Lambert
Air Pollution Specialist
Mobile Source Control Division

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

DATE: September 2, 2014 Mail-Out #MSC 14-12

TO: All Interested Parties

SUBJECT: THE LOWER-EMISSION SCHOOL BUS PROGRAM – CLARIFICATION OF DISMANTLING REQUIREMENTS

This Mail-Out provides guidance to air districts and eligible school bus owners participating in the Lower-Emission School Bus Program (LESBP). It is intended to assist in expediting the replacement of school buses by clarifying dismantling language in Mail-Out #MSC 11-16.

Below, the language changes are printed in a style to indicate changes from the existing language under the "Clarification of Dismantling Requirements" heading of Mail-Out #MSC 11-16. All existing language is indicated by plain type. All additions to language are indicated by underlined text. All deletions to language are indicated by ~~strikeout~~. Only those sections containing the suggested modifications from the existing language are included. All other portions remain unchanged and are indicated by the symbol "* * * * *" for reference.

The language is changed as follows:

* * * * *

Clarification of Dismantling Requirements

* * * * *

Several case-by-case (CBC) determination requests have been submitted to ARB regarding dismantle requirements of the old school bus. A CBC determination is no longer necessary for the following:

- Dismantling is not required within 60 days if documentation shows that the old bus was not driven after delivery of the new replacement bus~~;~~, or that the old bus was not used to transport children after the new replacement bus was first used to transport children;
- A copy of the Department of Motor Vehicles (DMV) customer receipt issued to the dismantler can be accepted as dismantle documentation in lieu of the REG 42 form indicating that the bus was junked as long as it is issued within 60 days of receipt of the new bus;
- The old bus does not have to be dismantled if it is utilized for training exercises by the local fire, police, or sheriff's department. An original letter signed by the school

district's authorized signatory and the ~~fire department's chief~~ head of the fire, police, or sheriff's department stating the bus was donated must be submitted to the air district along with the DMV title/registration noting the bus was junked or non-revivable.

* * * * *

If you have questions regarding this Mail-Out, please contact Ms. Kimya Lambert, Air Pollution Specialist, at (916) 323-2507 or via email at klambert@arb.ca.gov .

Sincerely,

/s/

Erik White, Chief
Mobile Source Control Division

cc: Ms. Kimya Lambert
Air Pollution Specialist
Mobile Source Control Division

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

DATE January 12, 2015 Mail-Out #MSC 15-01

TO: All Interested Parties

SUBJECT: THE LOWER-EMISSION SCHOOL BUS PROGRAM – REPLACEMENT BUS EMISSION CRITERIA – EFFECTIVE JANUARY 1, 2015 TO DECEMBER 31, 2015

The approved 2008 Lower-Emission School Bus Program Guidelines include emission criteria for replacement vehicles. Initially, 2010 and newer model year school bus engines were required to meet the 0.20 gram per brake horsepower-hour (g/bhp-hr) oxides of nitrogen (NO_x) and 0.01 g/bhp-hr particulate matter (PM) standards. However, due to the limited number of model year 2010 school buses that were manufactured and certified at or below the 0.20 g/bhp-hr NO_x emission levels, the NO_x emission criterion for replacement school buses was changed to 0.50 g/bhp-hr for the NO_x family emission limit (FEL) and the NO_x + non-methane hydrocarbons FEL during the March 2010 Board meeting. This modification was for the NO_x emission standard ONLY; the PM requirement of 0.01 g/bhp-hr is still in effect and has not changed. This change allowed continued funding for the cleanest school buses available.

The Air Resources Board (ARB or Board), at its March 2010 meeting, also directed staff to review the emission criteria requirement annually, and adjust it accordingly. As such, ARB staff has reviewed Executive Orders for 2015 model year school bus engines and determined that new school buses that meet the 0.20 g/bhp-hr NO_x emission standard are readily available to purchase from the three school bus vendors in California. Therefore, ARB is adjusting the NO_x emission criterion. The maximum emission criteria for contracts executed through calendar year 2015 are 0.20 g/bhp-hr NO_x and 0.01 g/bhp-hr PM.

If you have questions regarding this Mail-Out, please contact Ms. Kimya Lambert, Air Pollution Specialist, at (916) 323-2507 or via email at kimya.lambert@arb.ca.gov.

Sincerely,

/s/

Erik White, Chief
Mobile Source Control Division

cc: Ms. Kimya Lambert
Air Pollution Specialist
Mobile Source Control Division

Air Resources Board

Mary D. Nichols, Chair
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

DATE: October 13, 2015 Mail-Out #MSC 15-19

TO: All Interested Parties

SUBJECT: THE LOWER-EMISSION SCHOOL BUS PROGRAM - USING ASSEMBLY BILL 923 FUNDS FOR ZERO-EMISSION SCHOOL BUS FLEET EXPANSIONS AND ALL-ELECTRIC SCHOOL BUS CONVERSIONS

Changes and clarifications to the Lower-Emission School Bus Program (LESBP) are being made via mail-out under the authority granted by the Air Resources Board (ARB or Board) during the March 25, 2010 Board Meeting (Resolution 10-19). In accordance with Resolution 10-19, this mail-out provides guidance to local air districts and eligible school bus owners participating in the LESBP. Guidance in this mail-out is provided for using local air district Assembly Bill 923 funds for allowing fleet expansion when purchasing any new zero-emission school buses and funding all-electric school bus conversions (AB 923, Stats 2004 Ch 707).

The primary goal of the LESBP is to reduce children's exposure to both cancer-causing and smog-forming pollution. Cleaner school buses, whether zero-emission or conversion to all-electric, are an important component of the LESBP, as school buses typically remain in service for extended periods of time. Zero-emission school buses and all-electric school bus conversions have no tailpipe emissions, resulting in significant and immediate emission reductions that benefit children's health.

Zero-Emission School Bus Purchases (Fleet expansion)

Current language in the LESBP Guidelines requires that only replacement school buses be funded when older, dirtier school buses are dismantled and does not currently allow for fleet expansion. Current language also requires a replacement school bus to have a gross vehicle weight rating (GVWR) of 14,001 pounds or greater. This mail-out allows fleet expansion for purchases of zero-emission school buses, including new zero-emission school buses and zero-emission school bus conversions using a new school bus chassis, and does not limit the new school bus to a GVWR limit.

All-Electric School Bus Conversions

Effective January 1, 2012, Assembly Bill 470 (AB 470, Stats 2011 Ch 174) authorized using AB 923 funding for the purchase of new school buses, or retrofit of emissions control equipment for used school buses pursuant to the LESBP. ARB interprets this language as allowing the replacement of a fossil-fueled engine and drivetrain with an all-electric motor and drivetrain (all-electric school bus conversion). CHP requires engineering plans, certified by a California licensed engineer, to be able to safety certify a school bus. All-electric school bus conversions using technologies that have already been demonstrated on school buses and that have engineering plans are eligible for local air district AB 923 funding.

1. **Eligibility Requirements**

A. Eligible Applicants for School Bus Funding

Public school districts in California that own their own school buses are eligible to receive funding for zero-emission school bus purchases (fleet expansion) and all-electric school bus conversions. This includes public school districts that own their school buses but contract with a County Office of Education or private contractor for maintenance and operations. Where several public school districts have formed a Joint Powers Authority (JPA), and the JPA holds ownership of the school buses, then the JPA is also eligible to participate. Public charter schools that own their own school buses and County Offices of Education that own their school buses are also eligible to participate.

Private transportation providers that own their school buses and contract with public school districts to provide transportation services for public school children are also eligible to receive grant funding for zero-emission school bus purchases and all-electric school bus conversions.

B. School Buses Eligible for All-Electric Conversions

School buses with current California Highway Patrol (CHP) safety certifications qualify for all-electric school bus conversion funding if all other requirements in the LESBP Guidelines are met. There is not a gross vehicle weight rating requirement of over 14,000 pounds for an electric school bus conversion funded by local air district AB 923 funds.

2. Project Life

The zero-emission school bus and the school bus selected to be converted to all-electric with local air district AB 923 funding must be able to operate for at least a five-year project life.

3. Additional Requirements

The following documentation is required from the vendor (whether from a zero-emission school bus or an all-electric school bus) for new and converted school buses purchased under the LESBP with local air district AB 923 or other funds.

A. ARB Engine or Vehicle Certification (i.e. Executive Order) or ARB Approval Letter

Only zero-emission vehicles that are ARB certified or approved may be funded. For new zero-emission vehicles or conversions funded under the LESBP, an ARB approval letter is required. Information requested in the document "Information Required for Review of Requests for Approvals of Battery Electric / Hydrogen Fuel Cell Electric Heavy-Duty Vehicles" (http://www.arb.ca.gov/msprog/cihd/resources/content/approvals/approvals-hdelectric-checklist_20130506.pdf) must be submitted in order for ARB to verify that the vehicles do not emit any vehicle exhaust emissions or fuel-based evaporative emissions. Please submit the requested information to:

Attn: Annette Hebert, Division Chief
Emissions Compliance, Automotive Regulations and Science (ECARS) Division
9480 Telstar Avenue, Ste. #4
El Monte, CA 91731

B. Warranty Provisions

The vendor warranty must provide protection for a minimum of 60 months or 75,000 miles, whichever comes first, and provide full warranty coverage of, at a minimum, zero-emission or all-electric motor, drive train, batteries/energy storage system(s), parts and labor. Warranties must be fully transferrable to subsequent school bus purchasers for the full warranty coverage period.

Warranties must cover the following for the full warranty period (unless otherwise denoted):

- Extended Motor, Drivetrain (including Battery), and Zero-Emission Components: Provide warranty coverage against defects in material and workmanship for the motor, transmission, rear axle, and electric or zero-emission system components including the battery. Gaskets and seals are not required to be included under the warranty coverage.

- Frame Rails, Cross Members, and Cab: For new school buses, coverage extends to structural cracks in the frame caused by defects in material workmanship and against corrosion perforation of the cab. For school bus conversions, the all-electric school bus vendor is only responsible for damage or corrosion tied to, or resulting from, their workmanship on, or handling of, these parts.

- Battery Degradation Warranty: Provide warranty coverage against battery degradation below 80 percent of capacity.

C. Other Battery Information

The vendor must provide to the school bus owner documentation of the following battery information:

i. Type of battery pack(s)
ii. Size of battery pack(s)
iii. Expected life of battery pack(s)
iv. Type of battery
v. Size of battery (kilowatt-hour)
vi. Fast charge capability, if applicable

D. Service Provisions

The vendor must provide to the school bus owner a description of the plan to provide routine vehicle service.

E. Price Sheet

The vendor must provide a price sheet to the school bus owner for the new zero-emission school bus or all-electric school bus conversion.

F. Minimum Zero-Emission (i.e. All-Electric) Range

The vendor must demonstrate to purchaser that a minimum of 35 miles of zero-emission range can be traveled on a single charge on the route that will be traveled by the purchased vehicle.

G. Manufacturer's Information About Impacts to Zero-Emission Range

The vendor must provide to the school bus owner information from the manufacturer about operating conditions that can impact vehicle driving range and what those impacts are.

H. Temperature Range

The vendor must provide to the school bus owner the temperature range (ambient temperature conditions) needed for operating the zero-emission or all-electric school bus.

I. Proper Disposal of Batteries Description

The vendor must provide to the local air district a brief description of the information provided to the school bus owner regarding proper disposal of the vehicle battery and a description of how this information is conveyed to purchaser.

J. Documentation for CHP Safety Certification

The local air district must keep a copy of the CHP safety certification documentation in the project file that shows that the or zero-emission or all-electric school bus conversion has been inspected and signed off by CHP. The CHP safety certification documentation must be obtained by the school bus owner after the CHP has conducted a passing inspection. The school bus owner is required to provide documentation to the local air district that consists of a copy of a completed CHP form 343 – Safety Compliance Report/Terminal Record Update, OR a copy of a completed CHP form 343A – Vehicle/Equipment Inspection Report Motor Carrier Safety Operations or equivalent.

4. Requirements Specific to All-Electric School Bus Conversions

A. School Buses to be Converted Must be Ten-Years Old or Newer

This requirement is to help safeguard that all-electric school bus conversions are in good operating condition and remain in service through the required five year minimum project life.

B. Converted School Buses Must Have Certified Engineering Plans

The vendor performing the all-electric conversion must provide a set of engineering plans certified by a California Licensed Engineer to the CHP for the required safety certification inspection.

5. Allowable Costs

A. Purchase Costs for New Zero-Emission School Buses and All-Electric School Bus Conversions

Local air district AB 923 funds may be used to pay up to $400,000 of the purchase cost of the zero-emission school bus and all-electric school bus conversion. ARB anticipates conversion costs of about $200,000 per all-electric school bus conversion. However, the local air district may limit the amount of AB 923 funds spent on any school bus project.

B. Infrastructure Costs for New Zero-Emission School Buses and All-Electric School Bus Conversions

Local air district AB 923 funding for infrastructure necessary for powering zero-emission school buses and all-electric school bus conversions is allowed up to $20,000. AB 923 funding for vehicle to grid infrastructure costs is allowed up to 100 percent; however, the local air district may limit the amount of AB 923 funds spent on any school bus project.

6. Maintenance Costs are Disallowable

AB 923 funding may not be spent on maintenance costs for zero-emission school buses and all-electric school bus conversions.

7. Contract Requirements (between the local Air District and School Bus Owner)

A. Project Life

Successful applicants must make an enforceable commitment to own and operate the zero-emission school buses and all-electric school bus conversions for a minimum of five years (project life).

B. Pro-rating funds

Language included in the contract for all projects must stipulate that the school bus (including the chassis) must operate for the length of the project life or a pro-rated amount of the awarded funds must be returned to the local air district.

C. CHP Documentation of Safety Certification

Language must be included in the contract that stipulates that the vendor cannot receive payment until the school bus has been inspected by the CHP and the CHP has completed written documentation signifying that the school bus is safe to operate with children aboard.

8. **CHP Inspection Prior to Return to Service**

All school buses must pass a CHP safety inspection [per Title 13, California Code of Regulations section 1272(c)] every thirteen months and prior to its return to service. For all-electric school bus conversions, CHP requires engineering plans, certified by a California licensed engineer, of the converted school bus to conduct the required safety certification inspection.

9. **No Payment Prior to CHP Inspection**

All school buses must be safety certified by the CHP in order to receive payment with incentive funding. Copies of a completed CHP form 343 – Safety Compliance Report/Terminal Record Update, OR a copy of a completed CHP form 343A – Vehicle/Equipment Inspection Report Motor Carrier Safety Operations, or equivalent must be received by the local air district prior to payment to the conversion vendor.

If you have questions regarding this Mail-Out, please contact Lisa Jennings, Air Pollution Specialist, at (916) 322-6913 or via email at lisa.jennings@arb.ca.gov.

Sincerely,

/s/

Erik White, Chief
Mobile Source Control Division

cc: See next page

cc: Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division

Lisa Jennings, Air Pollution Specialist
Mobile Source Control Division

Air Resources Board

Mary D. Nichols, Chair
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

DATE November 2, 2015 Mail-Out #MSC 15-25

TO: All Interested Parties

SUBJECT: PROPOSED REVISIONS TO THE CARL MOYER PROGRAM GUIDELINES AND TO THE LOWER-EMISSION SCHOOL BUS PROGRAM GUIDELINES AS A RESULT OF SENATE BILL 513

This Mail-Out presents proposed revisions to the Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) Guidelines and to the Lower-Emission School Bus Program (LESBP) Guidelines to implement Senate Bill (SB) 513, which will become effective January 1, 2016 (Beall, Chapter 610, Statutes of 2015). The attachments to this mail-out contain the conforming changes to the Carl Moyer Program and LESBP:

- Attachment I - Description of Changes to 2011 Carl Moyer Program Guidelines
- Attachment II - Revised Language for the 2011 Carl Moyer Program Guidelines
- Attachment III - Revised Language for the 2008 LESBP Guidelines

Health & Safety Code Section 44287 requires the Carl Moyer Program to hold at least one public meeting to consider public comments when considering proposed revisions to the Carl Moyer Program Guidelines. Changes to the Carl Moyer Program Guidelines may be approved and implemented by the Executive Officer or designee after a public meeting and consideration of public comments under the authority granted by the California Air Resources Board (ARB or Board). ARB invites you to participate in a public meeting to consider these proposed changes to the Carl Moyer Program and to the LESBP Guidelines. The purpose of the public meeting is to explain the proposed changes and receive public comments for consideration. The public comment period for these revisions will be 45 days from the date of this notice. If approved, the changes will be implemented through the issuance of a Mobile Source Mail-Out posted on the following ARB website: http://www.arb.ca.gov/msprog/mailouts/mailouts.htm

The meeting will be held at the following time and place:

Date: Tuesday, November 17, 2015
Time: 10:00 AM – 12:00 PM
Place: Cal/EPA Headquarters Building
7th Floor, Room 710
1001 I Street
Sacramento, California 95812

This meeting will also include a teleconference call-in number for members of the public who wish to participate by telephone. The call-in number, available only at the time of the meeting, is 1-877-918-5754. The passcode is 59844.

If you have questions regarding the Carl Moyer Program changes, please contact Katherine Garrison, Air Resources Engineer, at (916) 322-1522 or via email at Katherine.Garrison@arb.ca.gov. If you have questions regarding LESBP, please contact Lisa Jennings, Air Pollution Specialist, at (916) 322-6913 or via email at Lisa.Jennings@arb.ca.gov.

Background: Since 1998, the Carl Moyer Program has filled a critical niche in California's strategy to achieve clean air. The Carl Moyer Program provides grant funding for the incremental cost of cleaner-than-required engines, equipment, and emission reduction technologies. The Carl Moyer Program complements California's regulatory program by funding emission reductions that are surplus, i.e., early and/or in excess of what is required by regulation.

Proposed revisions to the Carl Moyer Program (Attachments I and II) include streamlining the administrative process, providing allowances for leveraging funding, increasing the ability to fund school buses, and updating the cost-effectiveness factors to account for inflation consistent with the provisions of SB513. More substantial Guideline changes as part of fully implementing SB 513 will be developed and considered in the upcoming year to include additional source categories, extending leveraging opportunities to more grant programs, and establishing cost-effectiveness values based on the cost of technology and adopted regulations. Staff plans to seek public input on these long-term changes in 2016 and bring new program guidelines for consideration by the Board in 2017.

In addition to the proposed revisions to the Carl Moyer Program Guidelines, Attachment III provides proposed revisions to the LESBP Guidelines to address the following statutory changes contained in SB 513: allow AB 923 funds to pay for repowers of school buses, removes the cost caps and ownership limitation for onboard natural gas fuel tanks replacement and enhancement of deteriorating natural gas fueling dispensers of fueling infrastructure, and raise the administration expense allowance from 5 to 6.25 percent. In addition to the changes required by statute, staff reevaluated and updated the school bus project cost caps developed in 2011.

Submittal of Comments and Agency Contact Person: Interested members of the public may present comments either in person at the meeting, via telephone, or in writing. All comments on this matter must be received no later than December 18, 2015 (45 days after the date of this Mail-Out.)

Postal address: Katherine Garrison
California Air Resources Board
Mobile Source Control Division
P.O. Box 2815
Sacramento, California 95812
Electronic mail: Katherine.Garrison@arb.ca.gov
Telephone: (916) 322-1522

Please note that under the California Public Records Act (Government Code section 6250 et seq.), written and oral comments, attachments, and associated contact information (e.g., address, phone, email, etc.) become part of the public record and can be released to the public upon request. Additionally, this information may become available via Google, Yahoo, and any other search engines.

Accommodations: These facilities are accessible to persons with disabilities. If you require special accommodations or need this document in an alternate format (e.g., Braille, large print) or another language, please contact Katherine Garrison at (916) 322-1522 or via email at Katherine.Garrison@arb.ca.gov as soon as possible before the meeting. TTY/TDD/Speech to Speech users may dial 711 for California Relay Service.

Si necesita acomodación especial, o si necesita este documento en un formato alterno (por ejemplo, sistema Braille, o en impresión grande) u otro idioma, por favor llame a SRA. Adriana Smith (916) 323-5450 o Adriana.Smith@arb.ca.gov tan pronto como sea posible antes de la reunión prevista. Para el Servicio Telefónico de California para Personas con Problemas Auditivos, o de teléfonos TDD pueden marcar al 711.

Sincerely,

/s/

Erik White, Chief
Mobile Source Control Division

Attachments (3)

cc: See next page.

cc: Katherine Garrison
Air Resources Engineer
Mobile Source Control Division

Lisa Jennings
Air Pollution Specialist
Mobile Source Control Division

Adriana Smith
Air Pollution Specialist
Mobile Source Control Division

Attachment I
Description of Changes to 2011 Carl Moyer Program Guidelines

The following revisions are proposed to implement Senate Bill 513, which will become effective January 1, 2016. Each revision affects multiple sections in the Carl Moyer Program Guidelines. The Table below provides a description of each revision, along with the chapters, appendices, sections and pages affected. New sections are shown in underline font. The page numbers refer to the current Guidelines posted at http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm.

Revision	Sections Affected
Streamline: Administrative streamlining changes contained in SB 513 require the following guideline changes: • Fiscal deadlines for liquidation. • Return of funds and project non-performance requirements. • Match and state reserve funding. • Program administration funding amounts.	Chapter 3: – B.1 (Table 3-1), B.3 – p. 3-2. – D.4 (example table) – p. 3-4. – F.5 – p. 3-6. – G(3)(B)(1) – p. 3-7. – H (Table 3-3) – p. 3-8. – I.5(A), Table 3-4, I.5(D), I.9 – pgs. 3-9 to 3-11. – K.4 – p. 3-13. – L.1 – p. 3-14. – O.1, O.2 – p. 3-16. – P.3 – p. 3-18. – Q.1, Q.2 – p. 3-19. – R.5, R.6 – p. 3-21. – S.1 – p. 3-21. – T.1(A) – p. 3-22. – W.1 – p. 3-27, W(12) – p. 3-30. – EE.4, EE.5, EE.6 – pgs. 3-45 to 3-46. Appendix B: – Funding Target – p. B.5. – Liquidate – p. B-7. – Recaptured Funds – B-9. – Returned Funds – B.10.
Cost-Effectiveness: Update the cost-effectiveness limit and capital recovery factor per ARB authority to update these values annually.	Appendix G: – Introduction – p. G-2. – Table G-1 – p. G-3. – Table G-2f – p. G-5.

Revision	Sections Affected
School Bus: The bill allows school bus projects to receive funding up to the cost caps in the Lower-Emission School Bus Program (LESBP), and the project cost-effectiveness to be set forth in the Guidelines.	Chapter 3: – H.1(C), H.1(E), H.1(F), H.1(G) – pgs. 3-7 to 3-8. Chapter 4: – B, Table 4-2 – p. 4-3. – D.1(A) – p. 4-3. to 4-4 – D.1.(O) – p. 4-6. – D.3, D.3(A), D.3(B) – p. 4-8. – D.4 – pgs. 4-8 to 4-9. – D.5(A)(3) – p. 4-9. – E.4 – p. 4-13. Chapter 5: – A.2 – p. 5-1. – B, Table 5-1 – p. 5-2. – C.5(C), C.5(D), C.5(E) – pgs. 5-7 to 5-8. Appendix A: – GHG – p. A-3. – LESBP – p. A-4. Appendix C: – A, B.2 – p. C-2. – B.11 – p. C-10. – C. Formulas C-18 – p. C-13. Part 3, Agricultural Assistance Program: – A.3, A.5, A.6 – p. 1 of 4.
Leveraging: SB 513 removes the requirements that all non-Carl Moyer public funding must be included in the project cost-effectiveness and reduce the awarded Carl Moyer grant amount. The proposed guideline changes will allow Carl Moyer Program funding to be leveraged without penalty to project grant amount for the following funding sources: • Tax credits or deductions. • Public rebates or loans. • Local district penalty funds. • Public agency applicant funds toward the project. • Air Quality Improvement Program funds. • ARB's Low Carbon Transportation investment funds.	Chapter 2: – L, M, N, O, P – p. 2-2. Chapter 3: – V.5(A)(3) – p. 3-27. – Y.4(C), Y.4(D) – p. 3-32. Chapter 14: – C.1 – p. 14-1. Appendix C: – A – p. C-2. – B.10 – pgs. C-8 to C-9. – C. Formulas C-16, C-17a, C-17b – pgs. C-12 to C-13.

Attachment II
Revised Language for the 2011 Carl Moyer Program Guidelines

This document contains only proposed changes to the existing proposed guidelines, as summarized in Attachment I. If a Section is excluded from this document then no changes are proposed. The proposed changes include ~~strikeout text~~ representing deleted text, underline text depicting new language, plain text portraying no changes.

PART 1: PROGRAM OVERVIEW AND PROJECT CRITERIA
Chapter 2: GENERAL CRITERIA

L. ~~Total funds administered by the air district~~ Except for tax credits, tax deductions, public rebates, public loans, or local air district penalty funds, all other funds contributed to a project including air district local AB 923 funds, or local air district mitigation fees, and other state and local air district incentives, ~~and contributed to the project~~ must be part of the cost-effectiveness calculations and ~~the total funds contributed by the air district~~ must meet current cost-effectiveness limits (Health & Safety Code § 44283(d). An example of the calculation methodology is located in Appendix C.

M. If an applicant reports other public financial incentives, the air district must deduct this amount from the total incremental costs that can be funded with Carl Moyer Program funds, except for tax credits, tax deductions, public rebates, public loans, or local air district penalty funds (Health & Safety ~~.~~ Code § 44283(g)). An example of the calculation methodology is located in Appendix C.

N. ~~Beginning July 1, 2011, federal~~ Federal funding for programs to reduce greenhouse gas (GHG) emissions ~~(GHG), or~~ funding provided by the Alternative and Renewable Fuel and Vehicle Technology Program, Air Quality Improvement Program, or ARB's Low Carbon Transportation Investment funds to reduce GHG emissions are exempt from the requirements in sections L and M above. For these exempt projects, grantees must provide at least 15 percent of the project cost from non-public sources.

O. Public agency applicant funds toward a project are exempt from the requirement in sections L, M, and N above. Emission reductions may not be claimed for the applicant-funded portion of the project. The sum of all grants and public funding sources shall not exceed the total project cost (Health & Safety Code § 44287.2(b).

P. ~~O.~~ Carl Moyer Program grants can be no greater than a project's incremental cost. The incremental cost is described in each source category chapter of these Guidelines.

[All subsequent paragraphs have been renumbered accordingly]

Chapter 3: PROGRAM ADMINISTRATION

B. *ARB Solicitation of Program Fund Availability, Section B.1, Table 3-1 and Section B.3*

Table 3-1
Timeline for Initial Allocation of Funds

Date	Action
~~Mid-September~~ Early December	ARB sends application packet to air districts
~~Mid-November~~ By end of January	Air districts apply to ARB for funds
~~Early January~~ Mid-March	ARB notifies air districts of final awards
~~January - June~~	~~Air districts receive grant awards~~
By end of April ~~30~~	~~Deadline for air~~ Air districts ~~to accept or decline funds~~ return signed grant agreements
June 30 of Following Year	Target date for contracts to be executed
June 30 of Second Year	Deadline for air districts to receive fund disbursements. Target date for funds to be expended. ~~Funds must be expended.~~
June 30 of Fourth Year	Deadline for air districts to liquidate funds

3. ~~"Multi-District"~~ "State Reserve (e.g., Multi District)": ARB reserves the right to direct up to ten percent of each year's State Carl Moyer Program funds to eligible projects selected ~~that operate or impact air quality in multiple air districts~~ in accordance with Health & Safety Code section 44286(d).

D. *The Rural District Assistance Program, Section D.4, Example Table*

Example:
CMP Year ~~13~~ 18 (Fiscal Year ~~2010-11~~ 2015-2016)

January ~~June 2011~~ April 2016	Air ~~District~~ district applies for funds and executes Year ~~13~~ 18 Grant ~~Award~~ Agreement; funds may be designated to RAP
	~~Funds may be dedicated to RAP~~
March 1, ~~2013~~ 2018	Deadline to ~~dedicate~~ redirect funds to RAP
June 30, ~~2013~~ 2018	Deadline for air districts to receive fund disbursements. Target date to expend Year ~~13~~ 18 ~~Grant Award~~ grant award
June 30, 2020	Deadline to liquidate Year 18 grant award

F. *Final Grant Awards, Section F.5*

5. ~~Air districts have until June 30th of the second calendar year after funds are accepted from ARB to expend the allocation grant award~~ Air districts have until June 30 of the fourth calendar year after full grant execution to liquidate the grant award.

G. *Fund Disbursement to Air Districts, Section G.3(B)(1)*

(1) a. ~~Preceding~~ The preceding Yearly Report demonstrates both on-time expenditures and on-time liquidation consistent with Health & Safety Code section 44287~~(k)~~ (j).

-or-

~~The unexpended funds identified in the preceding Yearly Report have been received by ARB~~ b. The preceding Yearly Report does not demonstrate on-time liquidation consistent with Health & Safety Code section 44287(j) and any funds not liquidated by the four-year deadline have been received by ARB. NOTE: ARB will not request a return of any funds under contract, but may require a district to reassign funds liquidated from more recent years to the year due for liquidation.

H. *AB 923 - $2 Motor Vehicle Fee, Sections H.1(C), (E)-(G) and Table 3-3*

~~(C) Purchase of new school buses pursuant to the Lower-Emission School Bus Program~~

(E) ~~On-Board natural gas tank replacements in qualifying school buses.~~ Onboard natural gas tank replacements in existing school buses or the enhancement of deteriorating natural gas fueling dispensers of fueling infrastructure pursuant to the Lower-Emission School Bus Program adopted by the Board.

(F) ~~Infrastructure improvements for deteriorating natural gas fueling dispensers.~~ Alternative fuel and electric infrastructure projects solicited and selected through a competitive bid process.

(G) ~~Retrofits for qualifying school buses.~~ Purchase of new school buses or the repower or retrofit of emissions control equipment for existing school buses pursuant to the Lower-Emission School Bus Program adopted by the Board.

Table 3-3
Summary of $2 MV Fee Requirements and Oversight

Requirements/ Oversight	$2 MV Fee Used as Match	$2 MV Fee Used for SIP Credit	$2 MV Fee Not Match/ not SIP
~~Expenditure~~ Liquidation of funds within ~~two~~ four years	(1)	--	--
Meet full and complete Carl Moyer Program Guideline criteria	√	--	--
Subject to ARB Program Review	√	--	--
Subject to ARB project eligibility evaluation (e.g., cost-effective and surplus)	√	√	√
Fiscal reporting to ARB (list total funds expended in seven basic categories)[2]	√	√	√
Detailed reporting to ARB (project specifics submitted in current database)[2]	√	√	--

[1] Sufficient funds must be ~~expended~~ liquidated, regardless of their year of origin or source, to provide the required match by that year's ~~expenditure timeline~~ liquidation deadline. For example, for Year ~~9~~ 18, air districts must ~~expend their match~~ complete liquidation of applicable Year 18 match funds by June 30, ~~2009~~ 2020. When those funds were received is not a factor in determining this deadline.

[2] See Section R of this chapter for details.

I. Air District Match Funds, Sections I.5(A) and (D), Table 3-4, and I.9

(A) ~~In order to qualify as match funds, MV Fees~~ Match funds must fund projects that meet the Carl Moyer Program criteria. ~~Consistent with Health and Safety Code section 44287(j), MV Fees may not be used as match funds on projects involving stationary or portable engines, locomotives, or marine vessels. Table 3-4 identifies the source categories that are considered motor vehicles for the purposes of match funding.~~

~~Note that statute allows the $2 MV Fee to be used to fund any eligible Carl Moyer Program project – both motor vehicle and non-motor vehicle projects (Health & Safety Code § 44229(b)(1)). However, only motor vehicle projects funded with MV Fees may be counted as match projects.~~

~~Table 3-4~~
~~Eligibility of Motor Vehicle Registration Surcharge Fee Projects as Air District Match~~

~~Eligible~~	~~Not Eligible~~	
~~On-road*~~	~~Locomotives~~	~~Stationary or portable engines~~
~~Off-road mobile~~	~~Marine vessels~~	~~Agricultural Assistance projects~~

~~* Lower-Emission School Bus Program projects must meet Carl Moyer Program cost-effectiveness and other criteria to count as match.~~

(D) MV Fees used to fund Lower-Emission School Bus Program projects may count towards the air district match requirement if ~~they~~ the projects meet the Carl Moyer Program requirements. ~~and the current cost-effectiveness threshold. All air district or state incentive funds used to help pay for a school bus project must be included in this cost-effectiveness calculation.~~

9. Funding provided by a port authority or a local government for a qualifying project or for infrastructure that serves a qualifying project may count toward the air district's Carl Moyer Program matching fund requirement. ~~However, in any air district granted more~~ Matching funds provided by a port authority or a local government shall not exceed 30 percent of the total required matching funds in any district that applies for more than $300,000 of the state board funds~~, no more than 30 percent of an air district's match obligation may come from a port authority or local government as identified in~~ (Health & Safety Code § 44287(e)). Port authorities may participate through projects involving their own equipment, or by soliciting port tenants to apply for project funding.

K. Earned Interest, Section K.4

4. Expenditures for Program Administration: An air district can use up to 6.25 ~~five~~ percent of earned interest or other funds generated through the Carl Moyer Program on administrative expenses if the air district has one million or more inhabitants and up to 12.5 ~~ten~~ percent on administrative expenses if the air district has less than one million inhabitants, in accordance with Health & Safety Code § 44299.1~~(a)(3)(c)~~.

L. Program Administration and Outreach Funding Section L.1

1. Air District Funding: Air districts with one million or more inhabitants may use up to 6.25 ~~five~~ percent of their Carl Moyer Program funds on program outreach and administration (Health & Safety Code § 44299.1(c)), while air districts with under one million inhabitants may use up to 12.5 ~~ten~~ percent of their Carl Moyer Program funds (Health & Safety Code § 44299.1(d)).

O. *Progress Tracking: Fund Expenditure, Section O.1 and O.2*

1. ~~By June 30th of each year, air districts must have expended all Carl Moyer Program project funds associated with the funding year, two calendar years prior (Health & Safety Code § 44287(k)), as well as any other funds in the applicable funding target (see Section Q.2.). For example, funds awarded in Year 13 (fiscal year 2010-2011) must be expended by June 30, 2013. By this date, all administrative funds must be liquidated, as described in Section P.3.~~ Air districts shall make every effort to expend all Carl Moyer Program funds, including match funds, associated with the funding year two calendar years prior, as well as any other funds in the applicable funding target, by June 30 of each year (see Section Q.2.). For example, funds awarded in Year 16 (fiscal year 2013-2014) should be expended by June 30, 2016.

2. ~~Match funds must be expended by the same expenditure deadline as the Carl Moyer Program funds with which they are associated regardless of the date the match funds were collected by the air district.~~

P. *Progress Tracking: Fund Liquidation, Section P.3*

3. Administrative fund liquidation. Administrative funds associated with a grant must be liquidated by the ~~expenditure~~ liquidation deadline required for the grant consistent with Health & Safety Code section 44287~~(k)~~ (j). For example, administrative funds associated with funds awarded with the Year ~~13~~ 16 grant (fiscal year ~~2010-2011~~ 2013-2014) must be liquidated by June 30, ~~2013~~ 2018.

Q. *Cumulative Progress Tracking, Sections Q.1 and Q.2*

1. ARB shall track, cumulatively, an air district's progress in meeting program milestones to execute contracts~~,~~ and expend funds~~, and liquidate funds~~. Funds associated with a given funding year must be fully accounted for; however, ~~deadlines~~ contract execution and expenditure milestones may be met on a cumulative basis. For example, an air district ~~that must demonstrate~~ demonstrating expenditure ~~on~~ of Year ~~9~~ 16 funds by ~~the two-year statutory deadline~~ June 30, 2016 may ~~utilize~~ include Year ~~9~~ 17 funds expended early in place of Year ~~8~~ 16 funds not yet expended.

2. To assist participating air districts with cumulative tracking, ARB shall maintain in the CARL database appropriate progress tracking targets for each participating air district for each funding year. These funding targets shall list the total funds required to meet given milestones such as contract execution, fund expenditure, and funding cycle liquidation. Such tracking targets shall include, as appropriate, Carl Moyer Program grant funds (including ~~Multi-district funds~~ State Reserve funds awarded pursuant to Health & Safety Code section 44286(d), Rural District Assistance Program funds, and Carl Moyer voucher program funds), required match funds,

interest funds, reallocated funds, recaptured funds, and any other relevant funds associated with the Carl Moyer Program.

R. Yearly Report, Sections R.5 and R.6

5. Air districts that have not ~~executed contracts to cover all project funds received during the previous calendar year~~ demonstrated sufficient progress toward contract execution and expenditure targets in the Yearly Report must work with their ARB Carl Moyer Program liaison to ensure the air district is on target to ~~expend~~ liquidate all required program funds within ~~two years~~ the four-year deadline (see Section Q). At a minimum, such air districts must provide an email, an explanation with the Yearly Report, or other written documentation briefly describing:

   (A) The reason for the delay in executing contracts or expending funds, and

   (B) Their schedule for executing ~~the remaining~~ contracts, expending funds, returning funds to ARB, contributing the funds to the Rural District Assistance Program, or other action(s) as needed to ensure project funds are ~~expended~~ liquidated within the ~~two-~~ four-year deadline. Air districts choosing to contribute funds to the Rural District Assistance Program must do so by the March 1 date preceding the applicable funding year ~~expenditure~~ liquidation deadline (e.g., by March 1, ~~2011~~ 2018, for Year ~~11~~ 16 funds, which have a June 30, ~~2011~~ 2018, ~~expenditure~~ liquidation deadline)

6. If the Yearly Report identifies ~~an expenditure~~ a liquidation shortfall, the air district must submit and ARB must receive a check for the shortfall amount by ~~August 29~~ September 28 (i.e. 90 days after the June 30 liquidation deadline). ~~, concurrent with the deadline to submit the Yearly Report.~~ No additional disbursements will be made to the air district until the returned funds have been received by ARB.

S. Return and Reallocation of Unexpended Funds, Section S.1

S. Return and Reallocation of ~~Unexpended~~ Unliquidated Funds

1. ~~Any air district whose latest required Yearly Report does not demonstrate full expenditure of program funds with two years, must return the expenditure shortfall within 60 calendar days after the June 30th expenditure deadline~~ An air district that does not complete liquidation of program year funds by June 30 of the fourth year following grant agreement execution must return the unliquidated funds by September 28 (i.e. 90 days after the June 30 liquidation date) (Health & Safety Code § 44287~~(k)~~ (j)). Funds under executed contract, ~~though not expended,~~ are not subject to return ~~do not need to be returned~~ to ARB (Health and Safety Code § 44291(d)).

T. *Program Non-Performance, Section T.1(A)*

1. Program non-performance is air district non-compliance with program Guidelines or statute that is not corrected by the air district in a timely or satisfactory fashion. As directed by Health and Safety Code section 44291(d), ARB shall monitor air district programs to ensure that participating air districts conduct their programs consistent with the criteria and guidelines established by the ~~state board~~ Board. ARB may become aware of possible air district non-performance through program reports, Program Reviews of air districts, or other means. Examples of program non-compliance with program Guidelines or statute include:

   (A) ~~Failure to return to ARB a check for the expenditure shortfall identified by the Yearly Report (Health & Safety Code § 44287(k)).~~ Failure to return unliquidated funds within 90 days of the liquidation deadline (Health and Safety Code § 44287(j))

V. *Minimum Project Application Requirements, Section V.5(A)(3)*

(3) An applicant must disclose the value of any current financial public incentive that directly reduces the project cost for the same engine except for~~,~~ ~~including~~ tax credits, tax ~~or~~ deductions, rebates, or loans. ~~grants or other public financial assistance for the same engine.~~ The incremental cost of the project will be reduced by the amount of the other funds, ~~other current financial incentive,~~ except for projects, ~~beginning July 1, 2011,~~ in which the following funding sources are used ~~to reduce greenhouse gas emissions~~:

a. Federal funding to reduce ~~greenhouse gas~~ GHG emissions.

b. Alternative and Renewable Fuel and Vehicle Technology Program.

c. Air Quality Improvement Program.

d. ARB's Low Carbon Transportation Investment funds.

e. Tax credits or deductions.

f. Public rebates or loans.

g. Local air district penalty fees.

W. *Application Evaluation and Project Selection, Sections W.1 and W.12*

1. Air districts must review all applications for completeness upon receipt and notify the applicants within ~~five~~ 30 working days of receipt if their application is not complete, consistent with Health & Safety Code section 44288(a). The air district must make every effort to clearly state to the applicant what is required to make the application complete. The application and all

correspondence with the applicant should be kept in the applicant's project file. Additionally, the record of each project's rating and ranking, receipt date, or other project selection criteria must be maintained with the project file.

12. ARB shall include a solicitation packet on its website for State Reserve projects, funded by a reserve fund of up to ten percent of program funds, solicited and selected by ARB consistent with Health & Safety Code section 44286(d). The ~~multi-district~~ State Reserve project solicitation packet shall include the application requirements and application due date, project eligibility criteria, and project selection criteria.

Y. Minimum Contract Requirements, Section Y.4(C) and Y.4(D)

(C) Except for public agency applicants, the ~~The~~ contract must prohibit the grantee from applying for or receiving other public funds except for tax credit, tax deductions, public rebates, public loans, or local air district penalty funds for the same project except in the following situation. ~~Starting July 1, 2011, grantees~~ Grantees may apply for and receive additional funding for the same project from:

(1) federal programs to reduce ~~greenhouse gas~~ GHG emissions,
(2) ~~(GHG) or~~ funding provided by the Alternative and Renewable Fuel and Vehicle Technology Program,
(3) the Air Quality Improvement Program, or
(4) ARB's Low Carbon Transportation Investment funds to reduce GHG emissions.

These funds are not required to be included in the cost-effectiveness calculations (See Appendix C), but they are subject to the disclosure requirements. The total public funds except for tax credit, tax deductions, public rebates, public loans, or local air district penalty funds received by the grantee during the term of the Carl Moyer Program contract cannot exceed 85 percent of the project cost (see Chapter 2: General Criteria).

(D) A contract for a public agency applicant must prohibit the grantee from receiving grants and public funding sources that when combined, exceeds the total project cost.

EE. Nonperforming Projects, Sections EE.5 and EE.6

5. Program funds recaptured from a project grantee as a result of a settlement agreement executed by ARB shall be returned to the air district that granted the funds. Any penalties resulting from a settlement agreement executed by ARB or the Attorney General shall be deposited in the Air Pollution Control Fund (Health and Safety Code section 44291(e)).

6. An air district must describe its procedures for dealing with nonperforming

grantees in its Policies and Procedures Manual.

Chapter 4: ON-ROAD HEAVY-DUTY VEHICLES

B. *Maximum Eligible Funding Amounts, Table 4-2*

Table 4-2
Maximum Funding Amounts for Carl Moyer On-Road Vehicle Projects

Project Type		Maximum
Non-School Bus Projects	New Vehicle Purchase	25 percent
	Repower	$30,000
	Retrofit: Highest Level particulate matter (PM)+ NOx	$20,000
	Retrofit: 2007 Engine Standard Equivalent*	$10,000
	TRU Retrofit	100 percent
	Idling Reduction Retrofit	100 percent
School Bus Projects	New Zero Emission School Bus Purchase or Electric Conversion	$400,000
	School Bus Repower or Alt. Fuel Conversion	$70,000
	School Bus Retrofit	$20,000

* Including ARB verified selective catalytic reduction retrofits

D. *Project Criteria, Section D.1(A)*

(A) Maximum project life for on-road projects:

(1)	Buses ≥ 60,001 gross combined weight or gross vehicle weight (GVW) – New	12 years
(2)	School buses ≥ 33,001 GVW – New	20 years
(3)	School buses ≤ 33,000 GVW or Other On-road – New	10 years
(4)	Repower or Alt. Fuel Conversion Only (No Retrofit)	7 years
(5)	School bus Electric Conversions	5 years
(6)	~~(5)~~ Repowers + Retrofits	5 years
(7)	~~(6)~~ Retrofits	5 years
(8)	~~(7)~~ Fleet Modernization	See Chapter 5

A longer project life may be approved on a case-by-case basis if applicants provide justifying documentation.

The maximum project life does not consider regulatory requirements that may reduce actual project life below these maximum values.

D. *Project Criteria, Section D.1(O)*

(O) All existing school buses must have a current CHP safety certification at the time funding is awarded to retrofit or repower the school bus (i.e., the school bus may not have a lapsed CHP safety certification), and must be currently registered with the Department of Motor Vehicles.

D. *Project Criteria, Section D.3(A) and (B)*

3. New Purchase or Electric Conversion~~:~~

New purchase projects must be 30 percent cleaner than the current NOx emissions standard. Based on the 2010 NOx standard of 0.20 g/bhp-hr, engines that are certified to a NOx standard of 0.14 g/bhp-hr or lower and a PM standard of 0.01 g/bhp-hr or lower are eligible for new purchase funding. Vehicles with engines certified to a family emissions limit (FEL) are not eligible for new purchase funding. A school bus for an electric conversion project must be ten years old or newer. The maximum grant amount is 25 percent of the new purchase cost, with the exception of electric school bus purchase projects. ~~Due to tighter emissions standards, new purchase projects are not a common funding category.~~ Grants for new electric school bus purchase or electric conversion projects shall not exceed the lesser of the following:

(A) A funding cap of $400,000 established pursuant to the Lower-Emission School Bus Program (LESBP) (Health & Safety Code § 44299.90);

-or-

(B) The total cost of the vehicle or the electric conversion.

D. *Project Criteria, Section D.4*

4. Repower or School Bus Alt. Fuel Conversion

A replacement engine for a repower project must be an ARB certified engine meeting emissions levels of 0.20 g/bhp-hr NOx and 0.01 g/bhp-hr PM or lower for school bus repower projects, or 0.50 g/bhp-hr NOx and 0.01 g/bhp-hr PM or lower for other repower projects. ~~Repowers with replacement FEL engines that meet these emissions levels must be based on emission factors for model year 2007-2009 engines.~~ The maximum grant amount for school bus repower or alt. fuel conversion projects shall not exceed the funding cap of $70,000 established pursuant to the LESBP (Health & Safety Code § 44299.90). The maximum grant amount for other repower projects is $30,000.

However, due to technological constraints presented with the limited feasibility of newer engines with advanced emissions control equipment fitting into older chassis and maintaining durability, single vehicle repower, alt. fuel conversion, and electric conversion projects are not eligible for Moyer funding, except as described below.

D. *Project Criteria, Section D.5(A)(3)*

(3) $20,000 or the total retrofit cost, whichever is less, for retrofit devices installed on school buses.

E. Funding Eligibility for Projects Subject to In-Use Regulations, Section E.4

4. School Buses

~~Public school~~ School buses are eligible for Carl Moyer Program funding if they meet the general program criteria above.~~; however, their relatively low annual miles usually allow only for minimal grant amounts.~~ School bus projects do not have a fleet size limit, and can be funded up to the maximum grant amounts shown in Table 4-2. Conventional diesel or alternative-fuel school buses are eligible only for NOx and ROG reductions. Zero emission school bus projects including new purchases, replacements, repowers, and electric or alt. fuel conversions are eligible for NOx, ROG, and PM reductions. The cost-effectiveness values for school bus projects are $896,000/ton for zero emission school bus new purchase or electric conversion projects, and $149,000/ton for school bus repower or alt. fuel conversions projects. These cost-effectiveness estimates are based on average school bus operating usage from a limited number of previously-funded Carl Moyer school bus projects.

~~(A) School buses are eligible only for NOx and ROG reductions.~~

~~(B) School bus calculations must use the MHD vehicle emission factors and conversion factors to calculate cost-effectiveness.~~

Chapter 5: ON-ROAD HEAVY-DUTY VEHICLES FLEET MODERNIZATION

A. *Projects Eligible for Funding, Section A.2*

2. Used Replacement Vehicle Purchase: The purchase of a used vehicle ~~or school bus~~ with an engine certified to the 2007 or newer emission standards to replace an existing vehicle that is to be scrapped. School buses cannot be replaced with a used vehicle.

B. *Maximum Eligible Funding Amounts, Table 5-1*

Table 5-1
Maximum Funding Amounts for Fleet Modernization Projects

Oxides of Nitrogen (NOx) Family Emission Limit or NOx emission standard[1] grams per brake horsepower hour (g/bhp-hr)	Maximum[2]
0.20 g/bhp-hr (Heavy Heavy-Duty (HHD))	$60,000
0.50 g/bhp-hr (HHD)	$50,000
1.20 g/bhp-hr (HHD)	$40,000
0.20 g/bhp-hr (Medium Heavy-Duty (MHD))	$40,000
0.50 g/bhp-hr (MHD)	$30,000
1.20 g/bhp-hr (MHD)	$25,000
0.20 g/bhp-hr (Light Heavy Duty (LHD))	$30,000
0.50 g/bhp-hr LHD	$20,000
1.20 g/bhp-hr LHD	$15,000
0.20 g/bhp-hr New Diesel or Alternative-Fuel School Bus ~~bus (used)~~	~~100% of vehicle value~~ $165,000
New Zero Emission School Bus ~~bus (new)~~	~~100% of invoice~~ $400,000

[1] Applies to new or used vehicles unless otherwise noted.
[2] For fleets of three or fewer vehicles, the funding amount cannot exceed ~~eighty~~ 80 percent (80%) of vehicle value for used replacement vehicle or 80% of invoice for new replacement vehicle. For fleets with more than three vehicles, the funding amount cannot exceed ~~fifty~~ 50 percent (50%) of the vehicle value for used replacement vehicles or 50% of the invoice for new replacement vehicles. This limit does not apply to school bus projects.

C. *Project Criteria, Section C.5(C), (D) and (E)*

(C) Except for school buses, the ~~The~~ grant amount will be the lesser of the following:

(1) The cost-effective value of the project based on the weighted emission benefits;

-or-

(2) The maximum grant amount shown in Table 5-1.

(D) Grants for school bus projects shall not exceed the amounts shown in Table 5-1. The cost-effectiveness values for school bus replacement projects are $232,000/ton for conventional diesel or alternative fuel school buses, and $409,000/ton for zero emission school buses. These cost-effectiveness

estimates are based on average school bus operating usage from a limited number of previously-funded Carl Moyer school bus projects.

(E) ~~(D)~~ The replacement of two old, like trucks with one replacement truck is eligible for funding. Each old truck and the replacement truck must comply with all of the applicable guidelines. To determine cost-effectiveness, the annual emissions of the two old trucks are determined using emissions factors that correspond to the model year of each truck. The usage of the two old trucks is summed to establish projected replacement truck usage. The maximum allowable combined mileage is 60,000 miles per year (or 30,000 miles per truck per year). Replacement trucks are eligible for only one grant based on the combined usage – the amount of the grant award is not doubled.

[All subsequent paragraphs have been renumbered accordingly]

Chapter 14: LAWN AND GARDEN EQUIPMENT REPLACEMENT

C. Project Criteria, Section C.1:

1. General Lawn and Garden Equipment Replacement Criteria

   Except as allowed under Chapter 2, sections L, M and N, an ~~An~~ Air District may not contribute any additional non-Carl Moyer Program incentive funds towards the purchase of the individual lawn mower. However, bulk-purchasing discounts from the electric lawn mower manufacturer or merchant are allowed.

APPENDICES
Appendix A: ACRONYMS

GHG	Greenhouse Gas
LESBP	Lower-Emission School Bus Program

Appendix B: DEFINITIONS

Funding Target: The total funds required to meet a program milestone such as contract execution, fund expenditure, and funding cycle liquidation. Funding targets assist in cumulative progress tracking of funds and take into account funds that include regular Carl Moyer Program funds, ~~Multi-district~~ State Reserve funds, Rural District Assistance Program funds, Carl Moyer voucher program funds, required match funds, interest funds, reallocated funds, recaptured funds, and other relevant funds associated with the Carl Moyer Program.

Liquidate: Funds for a specified fiscal year that have been spent by a district to reimburse grantees for valid and eligible project invoices and district administrative costs. Payments withheld from the grantee by a district until all contractual reporting requirements are met may be excluded from these amounts for the purposes of liquidation. ~~those funds for which an air district has completely reimbursed an applicant for a valid and eligible project invoice. A contract is considered liquidated only when a check or checks are issued for the full contract amount and all invoices have been fully paid. Air districts exercising withhold allowances in their contracts may exclude these amounts for purposes of liquidation.~~

Recaptured Funds: Project funds ~~Funds~~ that are returned by a grantee to ~~the~~ an air district or ARB ~~due to a project that~~ because that grantee did not meet all of its contractual obligations. Air districts must expend these funds in a newer funding year.

Returned Funds: Funds ~~that must be~~ returned by a district to ARB for reallocation because they are either not ~~expended~~ liquidated by the required funding year ~~expenditure~~ liquidation deadline, or are associated with an ARB Incentive Program Review mitigation measure.

Appendix C: COST-EFFECTIVENESS CALCULATION METHODOLOGY

A. Introduction

All projects, with the exception of school bus projects, are subject to the cost-effectiveness limit defined in Appendix G: Cost-Effectiveness Limit and Capital Recovery Factors. School bus funding caps are located in Chapters 4 and 5. Carl Moyer Program (Moyer) funding, ~~funding under the air district's budget authority or fiduciary control~~ air district local AB 923 $2 motor vehicle fees, local air district mitigation fees, other local air district funds and all state funds must be included in determining the cost-effectiveness of surplus emission reductions except for tax credits, tax deductions, public rebates, public loans, local air district penalty funds and public agency applicant funds towards a project. Funding provided by federal programs designed to reduce greenhouse gas (GHG) emissions ~~(GHGs)~~ or funding provided by the Alternative and Renewable Fuel and Vehicle Technology Program or Air Quality Improvement Program, or ARB's Low Carbon Transportation Investment funds to reduce GHGs do not need to be included in the cost-effectiveness calculation. Projects that include such funds must meet all other Carl Moyer Program requirements. For more details see Chapter 2 and 3.

B. General Cost-Effectiveness Calculations

2. Calculating the Incremental Cost

   Maximum eligible percent funding amounts define incremental cost; in many cases an applicant will provide an estimate of the cost of the reduced technology. The incremental cost is determined by multiplying the cost of the reduced technology by the maximum eligible percent funding amount (from applicable chapter), as described in Formula C-3 below.

   Formula C-3: Incremental Cost ($)

   *Incremental Cost = Cost of Reduced Technology ($) * Maximum Eligible Percent Funding Amount*

   Generally the cost of the baseline vehicle for a new purchase is assumed to be a certain percentage of the cost of a new vehicle meeting reduced emissions from the standard. The cost of the baseline technology for a repower is assumed to be a percentage of the new engine. For retrofits, there is no baseline technology cost; hence the entire cost of the retrofit may be eligible for funding in most cases, but not for on-road. Refer to the On-Road chapter for specific eligible retrofit cost.

   For school bus fleet modernization projects, the incremental cost is determined ~~by adjusting the value given to the vehicle by the National Automotive Dealership Association (N.A.D.A.),~~ as described in Formula C-4 below.

Formula C-4: Incremental Cost for School Bus Fleet Modernization Projects ($)

~~*When the replacement school bus is not new, use the N.A.D.A. value where the N.A.D.A. value is the retail value of the used school bus * 100 percent.*~~

~~*When the replacement school bus is new, use*~~ *Dollar value on the invoice of the new school bus * 100 percent.*

Use the results from Formula C-3 or C-4 to complete Formula C-2 to determine the annualized cost of a project.

10. Calculations for Co-funding Moyer and Other Public Funds

~~Other public financial incentive funds, including tax incentives, received by the grantee directly must be deducted from the incremental cost.~~ Air districts must request information from grantee to determine what other public financial incentive funds will be used for the project and calculate the maximum Moyer grant amount to insure the applicant does not receive total funds greater than the total project cost. ~~Other public funds~~ Public agency applicant funds toward a project, tax credits, tax deductions, public rebates, public loans, or local air district penalty fees ~~which are determined to be operating funds and not incentives~~ do not need to be subtracted from the incremental cost. ~~Advice of legal counsel is recommended to assist in determining if other public funds should be classified as incentives or operating funds.~~ All other public financial incentives, including local air district mitigation funds and other local air district funds, must be deducted from the incremental cost when determining the eligible Moyer grant amount. Formula C-16 below must be used with Formula C-3 for projects with co-funding from these sources to determine the maximum grant amount based on incremental cost.

Formula C-16: Incremental Cost Limit for Moyer Grant for Grantees receiving other Public Financial Incentive Funds (must be used with Formula C-3 for projects with co-funding) Maximum Moyer Grant Amount (if cost-effective) = Incremental Cost (from Formula C-3) - Other Public Financial Incentive Funds*

Maximum Moyer Grant Amount (if cost-effective) =

Incremental Cost (from Formula C-3) – Other Public Financial Incentive Funds*

**Except for tax credits, tax deductions, public rebates, public loans, air district penalty fees.*

In addition to Carl Moyer Program funds, air district local AB 923 funds, local air district mitigation fees, other local air district funds ~~air districts must also include all funds under the district's budget authority or fiduciary control~~ plus any other state funds must be included when calculating cost-effectiveness for the project; the total funds assigned ~~contributed~~ by the air district to co-fund the project plus all state funds must meet current cost-effectiveness limits. Use Formula C-17a below (instead of Formula C-2) to determine the annualized cost for projects with co-funding.

Formula C-17a: Annualized Cost for Grantees receiving ~~other Public Financial~~ Air District Local AB 923 Funds, Local Air Mitigation Funds, Other Local Air District Funds, and/or State ~~Incentive~~ Funds (replaces Formula C-2 for projects with co-funding)

Annualized Cost ($) =

> *CRF * [Maximum Moyer Grant Amount (from Formula C-16) + Air District Local AB 923 Funds + Local Air District Mitigation Funds + Other Local Air District Funds + State Funds]*

For projects that include co-funding and the maximum grant amount based on incremental cost plus other state funds exceeds the cost-effectiveness limit, Formula C-17b must be used with Formula C-18 to determine the maximum grant amount. The final Moyer grant amount for a project is derived once the state and air district match are deducted. Use Formula C-17b below to determine the amount of funds the grantee may receive from the Carl Moyer Program.

Formula C-17b: Maximum Moyer Grant for Grantees receiving public funds (must be used with Formula C-18 for projects with co-funding where the maximum grant amount based on incremental cost plus other Air District and state funds exceeds the cost-effectiveness limit)

Moyer Grant Amount to Grantee =

> *Cost-effective Grant Amount (from Formula C-18) – [Air District Local AB 923 Funds + Local Air District Mitigation Funds + Other Local Air District Funds + State Funds]*

~~Beginning July 1, 2011, federal~~ Federal funding from programs that reduce ~~greenhouse gas emissions (GHGs)~~ GHG emissions or funding provided by the Alternative and Renewable Fuel and Vehicle Technology Program, or Air Quality Improvement Program, or ARB's Low Carbon Transportation Investment funds to reduce ~~(GHGs)~~ GHG emissions are not required to be included in Formulas C-16, C-17a and C-17b; for more details see Chapter 2 and 3. Public agency applicants are exempt from Formulas C-16, C-17a and C-17b; for more details see Chapter 2 and 3.

11. Calculation for projects exceeding the Cost-Effectiveness Limit

    For projects that have exceeded the weighted cost-effectiveness limit, the calculation methodology below must be applied in order to ensure final grant amounts meet the cost-effectiveness limit requirement. School bus projects are solely subject to cost caps, and will not use the calculation methodology below. The maximum grant amount is determined by multiplying the maximum allowed cost-effectiveness limit by the estimated annual emission reductions and dividing by the capital recovery factor in the C-18 formula below.

C. *List of Formulas*

Formula C-16: Incremental Cost Limit for Moyer Grant for Grantees receiving other Public Financial Incentive Funds

Maximum Moyer Grant Amount (if cost-effective) =

Incremental Cost (from Formula C-3) - Other Public Financial Incentive Funds*

**Except for tax credits, tax deductions, public rebates, public loans, air district penalty fees.*

Formula C-17a: Annualized Cost for Grantees receiving ~~other Public Financial Incentive~~ Air District Local AB 923 Funds + Local Air District Mitigation Funds + Other Local Air District Funds + State Funds.

Annualized Cost ($) =

CRF * [Maximum Moyer Grant Amount (from Formula C-16) + Air District Local AB 923 Funds + Local Air District Mitigation Funds + Other Local Air District Funds + State Funds]

Formula C-17b: Moyer Grant for Grantees receiving public funds from Air District

Moyer Grant Amount to Grantee =

Cost-effective Grant Amount (from Formula C-18) – [Air District Local AB 923 Funds + Local Air District Mitigation Funds + Other Local Air District Funds + State Funds]

Formula C-18: Maximum Grant Amount for ~~projects exceeding~~ Non-School Bus Projects Exceeding the Cost-Effectiveness Limit

Maximum Grant Amount =

(Cost-effectiveness limit * estimated annual emission reductions)/CRF

Appendix G: COST-EFFECTIVENESS LIMIT AND CAPITAL RECOVERY FACTORS

Per statute, the California Air Resources Board (ARB or the Board) updates the cost-effectiveness limit and capital recovery factors (CRF) annually. At the date of approval of the 2011 Carl Moyer Program Guidelines (April 28, 2011), the cost-effectiveness limit was $16,640 per weighted ton of pollutants reduced and the discount rate to determine capital recovery factors for various project lives was ~~2~~ two percent. In April of 2012, 2013, ~~and~~ 2014~~,~~ and 2015, the cost-effectiveness limit was updated to $17,080, $17,460, ~~and~~ $17,720 and $18,030 respectively. The discount rate remained at ~~2~~ two percent in 2012, ~~but~~ decreased to ~~1%~~ one percent in 2013 and 2014, and increased to two percent in 2015.

To update these values for use in 2016 , the average rates of return for U.S. Treasury securities and the California Consumer Price Index data available at the time of publication (January to September 2015) were used. The newly derived factors are shown in Tables G-1 and G-2f. ~~Effective April 1, 2015, the cost-effectiveness limit is updated to $18,030 and the discount rate increases to 2 percent.~~ Based on these values, the discount rate remains at two percent and the ~~The~~ capital recovery factors (as shown in Table G-3a) and ~~updated~~ truncated cost-effectiveness limit of ~~($18,030)~~ $18,260 ~~may be used~~ are in effect for contracts executed by air districts beginning ~~April 1, 2015~~ January 1, 2016. ~~but must be used starting July 1, 2015.~~ ARB will ~~continue to~~ update these factors prior to July 1, 2017, and annually thereafter through a ~~mail-out~~ Mail-Out.

Revised Cost-Effectiveness Limit

Table G-1
Cost-Effectiveness Limit Criteria

Year	Annual CA CPI	Percent (%) change (inflation rate)	Annual modified amount	Revised CE cap
1998	163.7	NA	NA	$12,000
1999	168.5	2.93%	$352	$12,352
2000	174.8	3.74%	$462	$12,814
2001	181.7	3.95%	$506	$13,319
2002	186.1	2.42%	$323	$13,642
2003	190.4	2.31%	$315	$13,957
2004	195.4	2.63%	$367	$14,324
2005	202.6	3.68%	$528	$14,852
2006	210.5	3.90%	$579	$15,431
2007	217.4	3.28%	$506	$15,938
2008	224.8	3.40%	$541	$16,479
2009	224.1	-0.31%	-$51	$16,428
2010	227.0	1.29%	$212	$16,640
2011	233.0	2.66%	$443	$17,084
2012	238.3	2.25%	$385	$17,469
2013	241.8	1.46%	$255	$17,724
2014	246.1	1.77%	$313	$18,037
2015	249.1	1.25%	$225	$18,262

Annual data for 2015 using the average rates of return for U.S. Treasury securities from January to September 2015 yielded a revised discount rate as shown in Table G-2f below. Rounding to a whole number yielded a discount rate of 2 percent:

Revised Capital Recovery Factors

Table G-2f
Discount Rate Factor (Available for use beginning January 1, 2016)

	Average Monthly Rate – 2015												
-	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
3 year	0.90%	0.99%	1.02%	0.87%	0.98%	1.07%	1.03%	1.03%	1.01%	NA	NA	NA	0.99%
5 year	1.37%	1.47%	1.52%	1.35%	1.54%	1.68%	1.63%	1.54%	1.49%	NA	NA	NA	1.51%
7 year	1.67%	1.79%	1.84%	1.69%	1.93%	2.10%	2.04%	1.91%	1.88%	NA	NA	NA	1.87%
10 year	1.88%	1.98%	2.04%	1.94%	2.20%	2.36%	2.32%	2.17%	2.17%	NA	NA	NA	2.12%
									Overall average for January – September 2015			-	1.62%

*NA: Data not available at time of publication.

PART 3: AGRICULTURAL ASSISTANCE PROGRAM

A. Background, Section A.3, A.5, and A.6.

3. Purchase of new school buses or the repower or retrofit of emissions control equipment for existing school buses pursuant to the Lower-Emission School Bus Program adopted by the Board. ~~School bus purchases through the Lower Emission School Bus Program.~~

5. Onboard natural gas tank replacements in existing school buses or the enhancement of deteriorating natural gas fueling dispensers of fueling infrastructure pursuant to the Lower-Emission School Bus Program adopted by the Board.

6. Alternative fuel and electric infrastructure projects solicited and selected through a competitive bid process.

Attachment III
Revised Language for the 2008 Lower-Emission School Bus Program Guidelines

Changes and clarifications to the Lower-Emission School Bus Program (LESBP) are being made via Mail-Out under the authority granted by the California Air Resources Board (ARB or Board) during the March 25, 2010 Board Meeting (Resolution 10-19). In accordance with Resolution 10-19, this Mail-Out provides guidance to local air districts and eligible school bus owners participating in the LESBP.

Guidance in this Mail-Out is provided to address changes to statute, effective January 1, 2016, that 1) allows AB 923 funds to pay for repowers of school buses, 2) removes the funding caps and ownership limitation for onboard natural gas fuel tank replacement and enhancement of deteriorating natural gas fueling dispensers of fueling infrastructure, and 3) raises the administration expense allowance from five to 6.25 percent. In addition to the statute changes, staff has reevaluated funding caps developed in 2011 and provided updated funding caps for school bus projects (Table 1: LESBP Project Funding Caps).

The primary goal of the LESBP is to reduce children's exposure to both cancer-causing and smog-forming pollution. Cleaner school buses are an important component of the LESBP, as school buses typically remain in service for extended periods of time. Providing funding ensures that these important emission reductions are achieved.

Funding for School Bus Repowers

Previous statute authorized using AB 923 funding for the purchase of new school buses, or retrofit of emissions control equipment for used school buses pursuant to the LESBP. Effective January 1, 2016, Senate Bill 513 (Beall, Chapter 610, Statutes of 2015) adds repowers to the list of eligible school bus projects.

1. ***Eligibility Requirements***

   A. Eligible Applicants for School Bus Funding

      Public school districts in California that own their own school buses are eligible to receive funding for repower projects. This includes public school districts that own their school buses but contract with a County Office of Education or private contractor for maintenance and operations. Where several public school districts have formed a Joint Powers Authority (JPA) and the JPA holds ownership of the school buses, then the JPA is also eligible to participate. Public charter schools that own their own school buses and County Offices of Education that own their school buses are also eligible to participate.

Private transportation providers that own their school buses and contract with public school districts to provide transportation services for public school children are also eligible to receive grant funding for repower projects.

B. School Buses Eligible for Repower Projects

School buses with current California Highway Patrol (CHP) safety certifications qualify for repower project funding if all other requirements in the LESBP Guidelines are met. There is not a gross vehicle weight rating requirement of over 14,000 pounds for a repower project funded by local air district AB 923 funds.

2. ***Requirements Specific to Repower Projects***

A. School Bus Age

The school bus selected for an AB 923 funded repower project must be ten years old or newer. This requirement is to help ensure that the repowered school bus is in good operating condition and will remain in service through the required five year minimum project life.

B. Project Life

The repowered school bus funded with local air district AB 923 funding must be able to operate for at least a five-year project life.

C. Emission Criteria

The maximum emission criteria for repowered engines are 0.20 grams per brake horsepower-hour (g/bhp-hr) oxides of nitrogen (NOx) and 0.01 g/bhp-hr particulate matter (PM).

D. Warranty Provisions

The vendor warranty must provide protection for a minimum of 60 months or 75,000 miles, whichever comes first, and provide full warranty coverage of, at a minimum, all parts and labor provided for the repower. Warranties must be fully transferrable to subsequent school bus purchasers for the full warranty coverage period.

E. Price Sheet

The vendor must provide a price sheet to the school bus owner for the repowered school bus.

F. Allowable Funding Costs

School bus repower projects are capped at $70,000 in funding and funding may not exceed the actual cost.

3. ***Contract Requirements (between the Local Air District and the School Bus Owner)***

A. Project Life

Successful applicants must make an enforceable commitment to own and operate the repowered school buses for a minimum of five years (project life).

B. Pro-rating funds

Language included in the contract for all projects must stipulate that the school bus must operate for the length of the project life or a pro-rated amount of the awarded funds must be returned to the local air district.

C. CHP Documentation of Safety Certification

Language must be included in the contract that stipulates that the vendor cannot receive payment until the school bus has been inspected by the CHP and the CHP has completed written documentation signifying that the school bus is safe to operate with children aboard.

4. ***CHP Inspection Prior to Return to Service***

All school buses must pass a CHP safety inspection [per Title 13, California Code of Regulations section 1272(c)] every thirteen months and prior to its return to service. For repowered school buses, CHP may require engineering plans, certified by a California licensed engineer, of the repowered school bus to conduct the required safety certification inspection.

5. ***No Payment Prior to CHP Inspection***

All school buses must be safety certified by the CHP in order to receive payment with incentive funding. Copies of a completed CHP form 343 – Safety Compliance Report/Terminal Record Update, OR a copy of a completed CHP form 343A – Vehicle/Equipment Inspection Report Motor Carrier Safety Operations, or equivalent must be received by the local air district prior to payment to the conversion vendor.

Replacement of On-Board Natural Gas Fuel Tanks on School Buses and Enhancement of Deteriorating Natural Gas Fueling Dispensers of Fueling Infrastructure Project Funding Caps and Ownership Limitation Removed

Current language in the LESBP Guidelines, specifically in Mail-Out #MSC 11-37, specifies AB 923 funds can pay for the replacement of on-board natural gas fuel tanks that are on school buses 14 years or older and owned by a public school district. Furthermore, maximum funding per school bus cannot exceed $20,000 for the replacement of on-board natural gas fuel tanks. Additionally, Mail-Out #MSC 11-37 specifies that school districts may only request one-time funding amounts not to exceed $500 per dispenser for funding to pay for improvements of deteriorating natural gas fueling dispensers of fueling infrastructure operated by a public school district.

Effective January 1, 2016, SB 513 removes the funding caps and ownership limitation. Therefore the language specified above in Mail-Out #MSC 11-37 no longer applies. Funding amounts for CNG tank replacement and CNG fueling dispensers have no funding cap (See Table 1). In addition, ownership is no longer limited to school districts. Public school districts in California that own their own school buses are eligible to receive funding for repower projects. This includes public school districts that own their school buses but contract with a County Office of Education or private contractor for maintenance and operations. Where several public school districts have formed a JPA and the JPA holds ownership of the school buses, then the JPA is also eligible to participate. Public charter schools that own their own school buses and County Offices of Education that own their school buses are also eligible to participate.

Private transportation providers that own their school buses and contract with public school districts to provide transportation services for public school children are also eligible to receive grant funding for replacement of on-board natural gas fuel tanks on school buses and enhancement of deteriorating natural gas fueling dispensers of fueling infrastructure projects.

Administrative Cap for AB 923 Funds

Current language in the LESBP Guidelines, specifically in Mail-Out #MSC 11-37, specifies that the administrative cap for AB 923 funds is five percent. Effective January 1, 2016, SB 513 increases the administrative cap to 6.25 percent.

LESBP Project Funding Caps

Current language in the LESBP Guidelines, specifically in Mail-Out #MSC 11-37, specifies project funding caps by funding source. Staff has updated the project funding cap guidance for AB 923 funds as reflected in Table 1: LESBP Project Funding Caps below.

Table 1: LESBP Project Funding Caps

LESBP Project Type	LESBP Project Funding Caps[1]
Diesel-Fueled School Bus Replacement	$165,000
Alternative-Fueled School Bus Replacement[2, 3]	$165,000
Zero-emission (includes battery electric or fuel cell) School Bus	$400,000
Electric Conversion (using an existing school bus)	$400,000
Repowers	$70,000
Diesel Retrofit Project per School Bus	$20,000
Diesel Retrofit Maintenance – includes purchase of a cleaning device system or paying for filters to be cleaned with a service contract	$2,500 within the $20,000 retrofit cap
Diesel Retrofit Infrastructure – includes electrical outlets necessary for regeneration of active retrofit systems	No cap on infrastructure, but must be within the $20,000 retrofit cap
Diesel Retrofit Data logging	$300 within the $20,000 retrofit cap
Alternative Fuel Infrastructure for Alternative-Fueled School Bus Replacements	$16,500/per school bus
Infrastructure for Powering Electric School Bus Replacements	$20,000/per school bus
Infrastructure for Electric School Bus Replacements Vehicle to Grid	No cap
On-board Natural Gas Fuel Tank Replacements	No cap
Enhancement of Deteriorating Natural Gas Fueling Dispensers	No cap

[1]Individual sources of funds may not be able to fund all project types or may have different funding caps.
[2] In addition to these funds, Hybrid Voucher Incentive Project (HVIP) funding may be available. See the program's website for details: http://www.californiahvip.org/ .
[3] Alternative-fueled school buses may be powered by natural gas, liquefied petroleum gas (LPG or propane), electricity, methanol, or ethanol fuels; however, for the purposes of this table, alternative-fueled excludes electric school buses.

Air Resources Board

Mary D. Nichols, Chair
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

DATE: October 21, 2015 Mail-Out #MSC 15-26

TO: All Interested Parties

SUBJECT: THE LOWER-EMISSION SCHOOL BUS PROGRAM – REPLACEMENT SCHOOL BUS EMISSION CRITERIA – EFFECTIVE JANUARY 1, 2016 UNTIL RESCINDED

The approved 2008 Lower-Emission School Bus Program (LESBP) Guidelines include emission criteria for replacement vehicles. Initially, 2010 and newer model year school bus engines were required to meet the 0.20 gram per brake horsepower-hour (g/bhp-hr) oxides of nitrogen (NO_x) and 0.01 g/bhp-hr particulate matter (PM) standards. However, due to the limited number of model year 2010 school buses that were manufactured and certified at or below the 0.20 g/bhp-hr NO_x emission levels, the NO_x emission criterion for replacement school buses was changed to 0.50 g/bhp-hr for the NO_x family emission limit (FEL) and the NO_x + non-methane hydrocarbons FEL during the March 25, 2010 Board meeting. This modification was for the NO_x emission standard ONLY; the PM requirement of 0.01 g/bhp-hr was still in effect and has not changed. This change allowed continued funding for the cleanest school buses available.

In addition, the Air Resources Board (ARB or Board), at its March 25, 2010 meeting, revised the 2008 LESBP Guidelines to require that staff review the emission criteria requirement annually, and adjust it accordingly, if necessary. In 2015, ARB staff reviewed Executive Orders for 2015 model year school bus engines and determined that new school buses that meet the 0.20 g/bhp-hr NO_x emission standard were readily available to purchase from the three school bus vendors in California and adjusted the NO_x emission criterion. The maximum emission criteria for contracts executed through calendar year 2015 is 0.20 g/bhp-hr NO_x and 0.01 g/bhp-hr PM. (See Mail-Out #MSC 15-01). ARB staff has determined that no change will be made to these emission criteria for the 2016 model year.

Staff will no longer review the emission criteria requirement annually as previously required by the 2008 LESBP Guidelines, but will only issue a new Mail-Out if the replacement school bus emission criteria changes. Until then, the emission criteria for replacement school buses remains at 0.20 g/bhp-hr NO_x and 0.01 g/bhp-hr PM.

If you have questions regarding this Mail-Out, please contact Lisa Jennings, Air Pollution Specialist, at (916) 322-6913 or via email at lisa.jennings@arb.ca.gov.

Sincerely,

/s/

Erik White, Chief
Mobile Source Control Division

cc: Lisa Jennings
Air Pollution Specialist
Mobile Source Control Division

Air Resources Board

Mary D. Nichols, Chair
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

DATE: December 18, 2015 Mail-Out #MSC 15-30

TO: All Interested Parties

SUBJECT: APPROVED REVISIONS TO THE CARL MOYER PROGRAM GUIDELINES AND TO THE LOWER-EMISSION SCHOOL BUS PROGRAM GUIDELINES AS A RESULT OF SENATE BILL 513

This Mail-Out describes the most recent approved revisions to the Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) Guidelines and to the Lower-Emission School Bus Program (LESBP) Guidelines to implement Senate Bill (SB) 513 (Beall, Chapter 610, Statutes of 2015) which will become effective January 1, 2016. Detailed descriptions of these changes were released for public comment on November 2, 2015 under Mail-Out #MSC 15-25.

In addition, staff has made modifications to the originally proposed changes described in Mail-Out #MSC 15-25 to address comments received during the public comment period. These modifications are described in the tables below and revised Guideline language attached. The approved revisions are also incorporated into the Guidelines located at:

- Carl Moyer Guidelines: http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm.
- LESBP Guidelines, Advisories, and Mail-Outs: http://www.arb.ca.gov/bonds/schoolbus/advisory/advisory.htm

Changes made to the Carl Moyer Program include streamlining the administrative process, providing allowances for leveraging funding, increasing the ability to fund school buses, and updating the cost-effectiveness factors to account for inflation consistent with the provisions of SB 513. More substantial Guideline changes as part of fully implementing SB 513 will be developed and considered in the upcoming year to include additional source categories, extending leveraging opportunities to more grant programs, and establishing cost-effectiveness values based on the cost of technology and adopted regulations. Staff plans to seek public input on these long-term changes in 2016 and bring new program guidelines for consideration by the Air Resources Board (Board) in 2017.

Background: The Carl Moyer Program has filled a critical niche in California's strategy to achieve clean air. The Carl Moyer Program provides grant funding for the incremental cost of cleaner-than-required engines, equipment, and emission reduction technologies. The Carl Moyer Program complements California's regulatory program by funding emission reductions that are surplus, i.e., early and/or in excess of what is required by regulation.

The primary goal of the LESBP is to reduce school children's exposure to both cancer-causing and smog-forming pollution. The program provides grant funding for new, safer school buses and to put air pollution control equipment (i.e., retrofit devices) on school buses that are already on the road.

Health & Safety Code Section 44287 requires the Carl Moyer Program to hold at least one public meeting to consider public comments when considering proposed revisions to the Carl Moyer Program Guidelines. Changes to the Carl Moyer Program Guidelines may be approved and implemented by the Executive Officer or designee after a public meeting and consideration of public comments under the authority granted by the Board. The public meeting regarding the Guidelines revisions proposed under Mail-Out #MSC 15-25 was held on November 17, 2015. The 45-day review period ended on December 18, 2015. This executed Mail-Out serves as notice that the revisions will become effective January 1, 2016.

Modifications to the Carl Moyer Program Guidelines proposed changes under Mail-Out #MSC 15-25:

Modification	Sections Affected
Streamline: • Associated Section H (implementing SB 513 changes to the AB 923 funding categories) incorporated to the districts' Yearly Report.	Chapter 3: – R.4.(B)

Modification	Sections Affected
<u>School Bus:</u> • Conforming changes to reflect changes to the LESBP cost cap. • Project definitions to add clarity. • School bus project cost-effectiveness limit based on LESBP cost cap values and average usage. The cost-effectiveness limit will be re-evaluated as part of the 2017 program guideline development process. • Formula modified to make it consistent with the changes in Appendix C, Section B.3.	<u>Chapter 4:</u> – A.7. – B., Table 4-2 – D.1(A)(4) – D.3, D.3(A) – D.4 – E.4(A), E.4(B) <u>Chapter 5:</u> – B., Table 5-1 – C.5(C), C.5(D), C.5(E) <u>Appendix C:</u> – B.11 – C. Formula C-4
<u>Cost-Effectiveness:</u> • Table G-2e heading corrected to clarify that it applies only through December 31, 2015. Beginning January 1, 2016, Table G-2f becomes effective.	<u>Appendix G:</u> – Table G-2e

Modifications to the LESBP Guidelines proposed changes under Mail-Out #MSC 15-25:

Modification	Sections Affected
• Clarified that cost caps introduced with SB 513 changes cannot be exceeded.	– LESBP Project Cost Caps
• Projects with Commitment of Funds prior to January 1, 2016 can complete those projects under the LESBP Guidelines language effective prior to this Mail-Out.	– Allowance for School Bus Projects Initiated Prior to January 1, 2016
• Removed fuel specificity from the cost cap values. Added cost caps for engines certified to the optional low NOx standards and for hybrid school buses.	– Table 1

If you have questions regarding the Carl Moyer Program revisions, please contact Katherine Garrison, Air Resources Engineer, at (916) 322-1522 or via email at Katherine.Garrison@arb.ca.gov. If you have questions regarding the LESBP revisions, please contact Lisa Jennings, Air Pollution Specialist, at (916) 322-6913 or via email at Lisa.Jennings@arb.ca.gov.

Sincerely,

/s/

Erik White, Chief
Mobile Source Control Division

Attachments (2)

cc: Katherine Garrison
Air Resources Engineer
Mobile Source Control Division

Lisa Jennings
Air Pollution Specialist
Mobile Source Control Division

Attachment B
Revised Language for the 2008 Lower-Emission School Bus Program Guidelines

Changes and clarifications to the Lower-Emission School Bus Program (LESBP) are being made via Mail-Out under the authority granted by the California Air Resources Board (ARB or Board) during the March 25, 2010 Board Meeting (Resolution 10-19). In accordance with Resolution 10-19, this Mail-Out provides guidance to local air districts and eligible school bus owners participating in the LESBP.

Guidance in this Mail-Out is provided to address changes to statute, effective January 1, 2016, that 1) allow AB 923 funds to pay for repowers of school buses, 2) remove the cost caps and ownership limitation for onboard natural gas fuel tank replacement and enhancement of deteriorating natural gas fueling dispensers of fueling infrastructure, and 3) raise the administration expense allowance from five to 6.25 percent. In addition to the statute changes, staff has reevaluated cost caps developed in 2011 and provided updated cost caps for school bus projects (Table 1: LESBP Project Cost Caps).

The primary goal of the LESBP is to reduce children's exposure to both cancer-causing and smog-forming pollution. Cleaner school buses are an important component of the LESBP, as school buses typically remain in service for extended periods of time. Providing funding ensures that these important emission reductions are achieved.

Funding for School Bus Repowers

Previous statute authorized using AB 923 funding for the purchase of new school buses, or retrofit of emissions control equipment for used school buses pursuant to the LESBP. Effective January 1, 2016, Senate Bill 513 (Beall, Chapter 610, Statutes of 2015) adds repowers to the list of eligible school bus projects.

1. ***Eligibility Requirements***

   A. Eligible Applicants for School Bus Funding

      Public school districts in California that own their own school buses are eligible to receive funding for repower projects. This includes public school districts that own their school buses but contract with a County Office of Education or private contractor for maintenance and operations. Where several public school districts have formed a Joint Powers Authority (JPA) and the JPA holds ownership of the school buses, then the JPA is also eligible to participate. Public charter schools that own their own school buses and County Offices of Education that own their school buses are also eligible to participate.

Private transportation providers that own their school buses and contract with public school districts to provide transportation services for public school children are also eligible to receive grant funding for repower projects.

B. School Buses Eligible for Repower Projects

School buses with current California Highway Patrol (CHP) safety certifications qualify for repower project funding if all other requirements in the LESBP Guidelines are met. There is not a gross vehicle weight rating requirement of over 14,000 pounds for a repower project funded by local air district AB 923 funds.

2. ***Requirements Specific to Repower Projects***

A. School Bus Age

The school bus selected for an AB 923 funded repower project must be ten years old or newer. This requirement is to help ensure that the repowered school bus is in good operating condition and will remain in service through the required five year minimum project life.

B. Project Life

The repowered school bus funded with local air district AB 923 funding must be able to operate for at least a five-year project life.

C. Emission Criteria

The maximum emission criteria for repowered engines are 0.20 grams per brake horsepower-hour (g/bhp-hr) oxides of nitrogen (NOx) and 0.01 g/bhp-hr particulate matter (PM).

D. Warranty Provisions

The vendor warranty must provide protection for a minimum of 60 months or 75,000 miles, whichever comes first, and provide full warranty coverage of, at a minimum, all parts and labor provided for the repower. Warranties must be fully transferrable to subsequent school bus purchasers for the full warranty coverage period.

E. Price Sheet

The vendor must provide a price sheet to the school bus owner for the repowered school bus.

F. Allowable Funding Costs

School bus repower projects are capped at $70,000 in funding and funding may not exceed the actual cost.

3. ***Contract Requirements (between the Local Air District and the School Bus Owner)***

A. Project Life

Successful applicants must make an enforceable commitment to own and operate the repowered school buses for a minimum of five years (project life).

B. Pro-rating funds

Language included in the contract for all projects must stipulate that the school bus must operate for the length of the project life or a pro-rated amount of the awarded funds must be returned to the local air district.

C. CHP Documentation of Safety Certification

Language must be included in the contract that stipulates that the vendor cannot receive payment until the school bus has been inspected by the CHP and the CHP has completed written documentation signifying that the school bus is safe to operate with children aboard.

4. ***CHP Inspection Prior to Return to Service***

All school buses must pass a CHP safety inspection [per Title 13, California Code of Regulations section 1272(c)] every thirteen months and prior to its return to service. For repowered school buses, CHP may require engineering plans, certified by a California licensed engineer, of the repowered school bus to conduct the required safety certification inspection.

5. ***No Payment Prior to CHP Inspection***

All school buses must be safety certified by the CHP in order to receive payment with incentive funding. Copies of a completed CHP form 343 – Safety Compliance Report/Terminal Record Update, OR a copy of a completed CHP form 343A – Vehicle/Equipment Inspection Report Motor Carrier Safety Operations, or equivalent must be received by the local air district prior to payment to the conversion vendor.

Replacement of On-Board Natural Gas Fuel Tanks on School Buses and Enhancement of Deteriorating Natural Gas Fueling Dispensers of Fueling Infrastructure Project Cost Caps and Ownership Limitation Removed

Current language in the LESBP Guidelines, specifically in Mail-Out #MSC 11-37, specifies AB 923 funds can pay for the replacement of on-board natural gas fuel tanks that are on school buses 14 years or older and owned by a public school district. Furthermore, maximum funding per school bus cannot exceed $20,000 for the replacement of on-board natural gas fuel tanks. Additionally, Mail-Out #MSC 11-37 specifies that school districts may only request one-time funding amounts not to exceed $500 per dispenser for funding to pay for improvements of deteriorating natural gas fueling dispensers of fueling infrastructure operated by a public school district.

Effective January 1, 2016, SB 513 removes the cost caps and ownership limitation. Therefore the language specified above in Mail-Out #MSC 11-37 no longer applies. Funding amounts for CNG tank replacement and CNG fueling dispensers have no cost cap (See Table 1). In addition, ownership is no longer limited to school districts. Public school districts in California that own their own school buses are eligible to receive funding for repower projects. This includes public school districts that own their school buses but contract with a County Office of Education or private contractor for maintenance and operations. Where several public school districts have formed a JPA and the JPA holds ownership of the school buses, then the JPA is also eligible to participate. Public charter schools that own their own school buses and County Offices of Education that own their school buses are also eligible to participate.

Private transportation providers that own their school buses and contract with public school districts to provide transportation services for public school children are also eligible to receive grant funding for replacement of on-board natural gas fuel tanks on school buses and enhancement of deteriorating natural gas fueling dispensers of fueling infrastructure projects.

Administrative Cap for AB 923 Funds

Current language in the LESBP Guidelines, specifically in Mail-Out #MSC 11-37, specifies that the administrative cap for AB 923 funds is five percent. Effective January 1, 2016, SB 513 increases the administrative cap to 6.25 percent.

LESBP Project Cost Caps

Language in the LESBP Guidelines, specifically in Mail-Out #MSC 11-37, specifies project cost caps by funding source and reiterates that eligible air district funds could be used to offset the higher cost of advanced technologies, such as hybrid-electric and alternative-fueled school buses, if the cost for those school buses exceeded the total of the cost cap and matching funds. With the changes introduced by Senate Bill 513, cost caps that cannot be exceeded have been established in the school bus program that

enable cost effectiveness limits to be calculated for school bus projects funds by the Carl Moyer Program.

Furthermore, alternative-fueled school buses are no longer considered advanced technologies. Currently, advanced technologies are school buses with engines meeting optional low NOx standards, hybrid school buses, and electric school buses.

Staff has updated the project cost cap guidance for AB 923 funds as reflected in Table 1: LESBP Project Cost Caps below.

Allowance for School Bus Projects Initiated Prior to January 1, 2016

Air districts may have committed funds to school bus projects prior to January 1, 2016, when the changes introduced by Senate Bill 513 become effective. School bus projects with Commitment of Funds (as defined in Appendix A: Glossary of Administrative Terminology) prior to January 1, 2016, can complete that project under the guidelines in place prior to January 1, 2016.

Table 1: LESBP Project Cost Caps

LESBP Project Type	LESBP Project Cost Caps[1]
School Bus Replacement	$165,000
School Bus Replacement -- with engines certified to any of the optional low NOx standards (i.e. 0.1, 0.05, or 0.02 g/bhp-hr[2])	$220,000
Hybrid School Bus[3]	$220,000
Electric (includes battery or fuel cell) School Bus	$400,000
Electric Conversion (using an existing school bus)	$400,000
Repowers	$70,000
Diesel Retrofit Project per School Bus	$20,000
Diesel Retrofit Maintenance – includes purchase of a cleaning device system or paying for filters to be cleaned with a service contract	$2,500 within the $20,000 retrofit cap
Diesel Retrofit Infrastructure – includes electrical outlets necessary for regeneration of active retrofit systems	No cap on infrastructure, but must be within the $20,000 retrofit cap
Diesel Retrofit Data logging	$300 within the $20,000 retrofit cap
Alternative Fuel Infrastructure for Alternative-Fueled School Bus Replacements	$16,500/per school bus
Infrastructure for Powering Electric School Bus Replacements	$20,000/per school bus
Infrastructure for Electric School Bus Replacements Vehicle to Grid	No cap
On-board Natural Gas Fuel Tank Replacements	No cap
Enhancement of Deteriorating Natural Gas Fueling Dispensers	No cap

[1]Individual sources of funds may not be able to fund all project types or may have different cost caps.
[2] grams per brake horsepower-hour (g/bhp-hr)
[3] In addition to these funds, Hybrid Voucher Incentive Project (HVIP) funding may be available. See the program's website for details: http://www.californiahvip.org/ .

February 20, 2020 Mail-Out #MSC 20-03

To: All Interested Parties

Subject: LOWER-EMISSION SCHOOL BUS PROGRAM MAIL-OUT #MSC 20-03 – FLEXIBILITY WHEN USING ASSEMBLY BILL 923 TO FUND REPLACEMENT SCHOOL BUSES

This mail-out provides guidance to air districts and public school districts following the Lower Emission School Bus Program (LESBP) guidelines and using Assembly Bill 923 (AB 923) funds for replacing school buses. Currently, the LESBP allows for replacement of 1993 and older model year buses. The California Air Resources Board (CARB) has determined that AB 923 funds can be used to replace school buses with a model year that is a minimum of 20 years old.

AB 923 Funds Background

AB 923 (AB 923; Stats. 2004, Ch. 707) funds are a source of school bus purchasing funds. This legislation provides a mechanism for local air districts to increase the motor vehicle registration fee surcharge by $2 dollars to fund projects in different clean air categories, including the purchase of school buses pursuant to the LESBP adopted by the state board.[1] AB 923 funds used to purchase school buses must be pursuant to the LESBP Guidelines. The primary goal of the LESBP is to reduce schoolchildren's exposure to smog-forming and cancer-causing pollution by upgrading California's aging school bus fleet. This is especially important in those heavily burdened communities where cumulative impacts from air pollution are the greatest. CARB has provided LESBP flexibility to air districts replacing school buses with AB 923 funding by revising replacement eligibility requirements as necessary; Mail-Out #MSC 08-003 from October 2010, allowed AB 923 funds to pay for MY 1987-1993 school buses powered by two-stroke engines and Mail-Out #MSC 10-45 from August 2008, increased eligibility to 1993 and older model year school buses. All LESBP mail outs can be found on the LESBP webpage at: Guidelines and Advisories for the Lower-Emission School Bus Program.

---

[1] Assembly Bill 923, Firebaugh, Chapter 707, Statues of 2004. Available at **AB 923 Assembly Bill**

Additional Flexibility for Spending AB 923 Funds to Purchase New School Buses

CARB is increasing flexibility for spending AB 923 funds to purchase new school buses by revising the model year thresholds specified in Mail-Out #MSC 10-45. The majority of 1993 and older model year school buses in California have been replaced. California school bus data, compiled from multiple sources, indicates that out of approximately 25,000 school buses in California, approximately 2,000 school buses are registered as 1993 and older model year school buses. This equates to about 8 percent of the State school bus population. Multiple air districts have requested that CARB adjust the eligible school bus model year under the LESBP because those air districts no longer have eligible 1993 and older model year buses in their districts to replace. In order to enable air districts to continue to turn over the older school buses operating in California and allow flexibility in which buses are replaced, CARB has expanded school bus eligibility as follows:

- Increase model year eligibility to include buses that are a minimum of 20 years old or older;
- Allow buses with a model year that is 20 years old or older, that have been repowered with newer engines to be replaced; and
- Give air districts discretion in determining the order in which buses are replaced. The oldest buses do not need to be funded for replacement first but districts are encouraged to replace school buses that have the greatest air quality impact.

If you have questions regarding this mail out or the LESBP, please contact Danielle Lawrence, Air Pollution Specialist, at (916) 323-0027 or by email at danielle.lawrence@arb.ca.gov.

Sincerely,

/s/

Jack Kitowski, Chief
Mobile Source Control Division

cc: Danielle Lawrence
Air Pollution Specialist
Mobile Source Control Division