

## **School Bus Webinar Questions 5/9/2013 and 5/23/2013**

### **Definition of School Bus**

Q: Using your definition, is a tour coach bus used to transport kids from schools to school activities considered a school bus under this regulation?

A: The regulation defines a school bus as a motor vehicle as defined in California Vehicle Code, section 545.

### **Level of Verified Diesel Emission Control System (VDECS)**

Q: PM filter = Level 3 only?

A: Mostly, except for school buses equipped with Level 2 devices on or before December 31, 2005 and if no Level 3 device is available but a Level 2 device is available.

### **Extension for Unavailability of VDECS**

Q: Is there an application for this extension? I already have worksheets.

A: Here is the link to the "PM Filter Availability and Extensions" factsheet:

<http://www.arb.ca.gov/msprog/onrdiesel/documents/faqPMExtension.pdf>

This factsheet outlines the steps you need to take to submit an extension request to ARB. Page 2 is a worksheet that needs to be filled out and submitted with your request.

Please provide the information described on the worksheet for each vehicle that cannot be retrofitted and mail your application to PM Filter Extension Requests, P.O. Box 2815, 5th Floor, Sacramento, CA, 95812.

Q: When in the compliance year should an end user apply for an extension of deadline for unavailability of VDECS? December or earlier?

A: The regulatory language allows until January 31 of the applicable compliance year to record and submit the requested information for the compliance extension; however, staff recommends submitting the requested information before September 1 of the year preceding the compliance date.

Q: What about 1986 engines?

A: Typically VDECS are available for 1990 model year engines and newer; however, the ESW CleanTech Horizon is available for various 1987 and older model year engines.

Owners of buses that do not have available VDECS will have to submit the requested information for an extension of deadline for unavailability of VDECS and replace the vehicle before January 1, 2018.

Q: Fleets with Detroit DSL engines, do we need to apply for extensions or just retire the fleet 2018?

A: If there are currently no VDECS available for these engines, owners of those buses with have to submit the requested information for an extension of deadline for unavailability of VDECS and replace the vehicle before January 1, 2018.

Q: At the inception of this program I had 6 buses in the grant application. CARB inspected all of these busses and disqualified 2 of them for installation of PM's. So I still have to apply for an extension even though CARB sees these vehicles as uninstalleable for PM?

A: Yes, please complete the worksheet (see link above) and mail to PM Filter Extension Requests, P.O. Box 2815, 5th Floor, Sacramento, CA, 95812.

Q: SUHSD has an annual transportation budget of \$1.2 M. During the 2011-12 fiscal year, we spent an additional \$590,000 to comply with ARB regulations. We still have four (4) buses which cannot be retrofitted as they have 2-stroke diesel engines. Proposition 1B funding opportunities are not extended to these school buses as they are 1989 & 1991 model year. SUHSD doesn't qualify for Small School District School Bus Replacement as we have more than 2500 students. Has ARB considered how to handle this unfunded mandate?

A: There are currently no VDECS available for 2-stroke diesel engines so owners of those buses with have to submit the requested information for an extension of deadline for unavailability of VDECS and replace the vehicle before January 1, 2018. (Please see link above.)

Q: Can you tell either me or us what to do and how to secure exemption for school buses there aren't available PM filters for? Who and how do we report? What will we need? What forms?

A: Here is the link to the "PM Filter Availability and Extensions" factsheet:

<http://www.arb.ca.gov/msprog/onrdiesel/documents/faqPMExtension.pdf>

This factsheet outlines the steps you need to take to submit an extension request to ARB. Page 2 is a worksheet that needs to be filled out and submitted with your request.

Q: Question on School Bus exemption...Cleaire was a company that several school districts were relying on to trap their buses. When they went out of business many school buses did not have technology to trap those buses and an exemption was going to be filed. Now we are understanding that Cleaire was bought and going to re-open

pending ARB approval. Does that mean an exemption would not be accepted if they are back in business? If so then school buses need an extension to be in compliance. Will ARB extend the deadline?

A: The regulation defines "Highest Level VDECS" as the highest level VDECS verified by ARB under its Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines (Verification Procedure), title 13, CCR, sections 2700-2710, for a specific engine as of 10 months prior to the compliance date, which the diesel emission control strategy manufacturer and authorized diesel emission-control strategy dealer agree can be used on a specific engine and vehicle combination without jeopardizing the original engine warranty in effect at the time of application.

In this case, if there was no device available 10 months prior to the compliance deadline (March 1), then the district may be granted an extension for one year.

### **Cleaire**

Q: Will you be addressing the Cleaire issue? Since they closed their doors suddenly, it does impact our ability to install similar traps on all of our buses. Believe a delay in implementing school bus reg's is appropriate. No one wants to run a fleet with multiple types of traps on buses. Consistency in equipment is critical.

A: Cleaire products have not been available for sale or lease since it ceased operations on January 18, 2013. ESW CleanTech Incorporated (ESW CleanTech) acquired the Cleaire product line on April 18, 2013, and will provide new sales of product under its ownership as well as support for existing Cleaire customers. Vehicles that have the Cleaire devices already installed in a verified configuration will continue to meet applicable in-use fleet rule requirements. Please refer to the following website for additional information:

<http://www.arb.ca.gov/diesel/verdev/companies/cleaire/cleairepage.htm>

### **Credits**

Q: Are you saying that the exceptions for alt fuel vehicles are no longer valid after Jan 1, 2014?

A: Yes, fleets with fuel efficient hybrid, alternative fueled, and electric school buses or school buses with pilot ignitions engines receive a credit until January 1, 2014.

### **14,000 pounds plus Vehicles with Engines certified to 8,000 - 14,000 pounds**

Q: We have a bus with 14,050 gwr but with a light engine, 7.3 L. What do we do with this vehicle?

A: Both the Public Agency and Utility Regulation and the Truck and Bus Regulation require PM filters on all vehicles over 14,000 pounds GVWR. Because no PM exhaust filter is verified for engines less than 14,001 pounds GVWR, you must apply for an extension for Unavailability of PM filter annually until 2017 and bring the vehicle into compliance by January 1, 2018, by either replacing the engine with one that can have a PM filter installed or replacing the vehicle with a compliant one. (See link to the "PM Filter Availability and Extensions" factsheet: <http://www.arb.ca.gov/msprog/onrdiesel/documents/faqPMExtension.pdf> )

## **Public Versus Private**

Q: What is the difference between public and privately owned?

A: "Private Utility Vehicle" means a vehicle owned by a privately-owned or publicly held company or corporation that provides the same or similar services for water, natural gas, and electricity as a public utility operated by a municipality.

"Municipality" means a city, county, city and county, special district, or a public agency of the State of California, and any department, division, public corporation, or public agency of this State, or two or more entities acting jointly.

## **Recordkeeping**

Q: Please send me the records requirements.

A: The requirements for school bus recordkeeping are below:

### **(3) School Buses**

(A) Fleet owners of school buses shall maintain records of all the information listed in sections 2025(r)(7) through 2025(r)(10).

(B) Fleet owners using the downsize credits of section 2025(k)(2) must maintain records of all the information listed in sections 2025(r)(7) through 2025(r)(10) for all school buses in the 2006 baseline fleet and for all school buses in the fleet on January 1 of the compliance year that were registered. Fleet owners do not have to have to keep engine and VDECS information that is required under sections 2025(r)(9) and 2025(r)(10) for school buses registered on October 1, 2006 that are no longer in the fleet.

(C) Fleet owners with low-use buses must maintain records of all the information listed in section 2025(r)(12) for each low-use bus.

(D) Fleet owners must comply with record keeping requirements for VDECS failures and maintenance as required in sections 2025(s)(10) and 2025(s)(14).

The regulatory language is located at:

<http://www.arb.ca.gov/msprog/onrdiesel/documents/TBFinalReg.pdf>

Q: As far as ARB goes are we required to obtain preventative maintenance records, if so how long?

A: Engine maintenance records are required to be kept for school buses in 2025 (s)(10) VDECS failure.

Q: Can you please email a sample of the records I should be keeping?

A: The records that must be kept are listed below:

**(7) Owner Contact Information: Compliance reports must include the following information:**

- (A) Fleet owner's name;
- (B) Name of company or agency;
- (C) Motor carrier identification number;
- (D) Corporate parent name (if applicable);
- (E) Corporate parent taxpayer identification number (if applicable);
- (F) Company taxpayer identification number;
- (G) Street address and mailing address;
- (H) Name of responsible person;
- (I) Title of responsible person;
- (J) Contact name;
- (K) Contact telephone number;
- (L) Contact email address (if available); and
- (M) License number issued by the Public Utilities Commission (if applicable).

**(8) Vehicle Information**

Fleet owners must provide to the Executive Officer a list of all vehicles subject to the reporting requirements along with the information listed in (A) through (S) below for each vehicle:

- (A) Vehicle identification number;
- (B) Vehicle manufacturer;
- (C) Vehicle model;
- (D) Gross vehicle weight rating;
- (E) Vehicle model year;
- (F) License plate number;
- (G) The state, province, or country where the vehicle is or was registered and type of registration plate;
- (H) Vehicle type, including whether the vehicle is a school bus, agricultural vehicle, log truck, truck-tractor, two-engine sweeper, low-mileage construction truck or yard truck; (I) If the vehicle was added to the fleet prior to January 1, 2012, the fleet owner may enter "January 1, 2012";
- (J) Date that a vehicle was retired, sold, or scrapped after January 1, 2012;

- (K) Whether the vehicle will be designated as a low-use vehicle as defined in section 2025(d)(41);
- (L) Whether the vehicle has been certified as non-operational with the California Department of Motor Vehicles or equivalent documentation from the state, province, or country where the vehicle is registered and whether the vehicle will not operate in California.
- (M) Whether the vehicle is a fuel efficient hybrid vehicle as defined in section 2025(d)(31);
- (N) Whether the vehicle is propelled by an alternative-fueled engine as defined in section 2025(d)(8);
- (O) Whether the vehicle will use the extension or exemptions for vehicles used exclusively in NOx Exempt Areas in section 2025(p)(1);
- (P) Whether the fleet size is more than three vehicles subject to the regulation with a GVWR greater than 14,000 lbs;
- (Q) Whether the vehicle is a log truck utilizing the optional phase-in for Log Trucks provision in section 2025(m)(12);
- (R) Whether the vehicle is a low-mileage construction truck that will use the extension for low-mileage construction trucks specified in section 2025(p)(2); and
- (S) Whether the vehicle was partially paid for with public funds, and if so, the information about the funding contract specified in section 2025(r)(18).

**(9) Engine Information Reporting**

Except as provided in section 2025(r)(13)(A) and 2025(r)(19) below, the following information for each engine that propels a vehicle reported per section 2025(r)(8) and for each sweeper engine that operates auxiliary equipment must be reported to the Executive Officer:

- (A) Engine manufacturer;
- (B) Engine model;
- (C) Engine family for all 1974 model year and newer engines;
- (D) Fuel type;
- (E) Engine model year;
- (F) Whether the engine meets an on-road or off-road emissions standard;
- (G) Whether the engine is used to propel the vehicle or to operate auxiliary equipment;
- (H) The emissions standard to which the engine was certified if lower than required for the engine model year; and
- (I) Whether the engine was partially paid for with public funds, and if so, the information about the funding contract specified in section 2025(r)(18).

**(10) Verified Diesel Emission Control Strategies Reporting**

Except as provided in section 2025(r)(13)(A) below, for each VDECS that is installed on an engine listed per section 2025(r)(9), the fleet owner must report the following information to the Executive Officer:

- (A) Description of VDECS installed;
- (B) VDECS family name;
- (C) Serial number, or experimental part number, or aftermarket part number;

(D) Date installed;

(E) If claiming early PM retrofit credits of section 2025(j)(2)(A) and the VDECS is installed between July 1, 2011 and October 1, 2011, the fleet owner must attest to having records to document the purchase agreement and down payment for the VDECS by May 1, 2011;

(F) Whether the VDECS was partially paid for with public funds and the information in 2025(r)(18) if partially paid for with public funds; and

(G) Whether the VDECS was installed on the engine to comply with another California in-use regulation.

### **School Bus Compliance**

Q: We install DOC's in 2004 on School Buses, paid by a grant. Are they grandfathered or will they need to be replaced with a DPF.

A: Level 1 devices (technologies achieving at least 25 percent or greater reduction in particulate matter) must be replaced by a Level 3 device (technologies achieving at least 85 percent or greater reduction in particulate matter). School buses that were equipped on or before December 31<sup>st</sup>, 2005, with a Level 2 VDECS, which was the highest level VDECS at the time of installation, are considered in compliance with PM BACT.

Q: What is a level 2 device?

Level 2 devices are technologies achieving at least 50 percent or greater reduction in particulate matter.

Q: Once school bus is retrofitted is it good for life?

A: Once a school bus [defined in California Vehicle Code (CVC) section 545] has a filter or other verified VDECS installed to meet the requirements of the regulation, there are no further requirements for that bus (i.e. Upgrade/repower to 2010 MY engine) so long as the filter is maintained and in proper working condition and the school bus continues to meet the definition as defined in the vehicle code.

### **Compliance Schedules**

Q: Referring to slides 11 and 12 for Private School Bus fleets and meeting MY2010 engine dates (the column on the right): Is the requirement to meet PM and NOx or just PM? Or are the engines to be retired?

A: Publicly or privately owned school buses, as defined in CVC section 545, need to meet the PM filter requirements per the school bus phase in schedule which was shown on slide 8 and appears below:

<b>January 1</b>	<b>PM filter</b>
<b>2012</b>	<b>33%</b>
<b>2013</b>	<b>66%</b>
<b>2014</b>	<b>100%</b>

School buses are not required to comply with the 2010 model year engine schedule.

### **Truck and Bus Compliance (not School Bus)**

Q: Regarding the private fleet rule, if a PM filter is installed by Jan 1 2014, how long does that extend replacement of that vehicle and does the extension apply to any GVWR vehicle?

A: Under the Truck and Bus Regulation, “any” vehicle (light or heavy) that is equipped with a PM filter before January 1, 2014 would be compliant until 2020, regardless of engine model year. The fleet owner is required to report information about the eligible vehicle(s) in the Truck and Bus Reporting System by January 31, 2014.

### **Webinar Presentation Availability**

Q: Will these charts be available to receive via e-mail since we can't print them as they are on the screen?

A: The charts and tables shown throughout the presentation are included in the .pdf handout. Email [dchamber@arb.ca.gov](mailto:dchamber@arb.ca.gov) if you do not have a copy of this handout.

### **Low-Use**

Q: Can the CHP 292 card be the documentation for the mileage traveled per year?

School buses designated as low-use must comply with the recordkeeping requirements in 2025 (s)(3) that requires maintaining records of all the information in section 2025 (r)(12) for each low-use bus.

Among those requirements is the mileage readings from a properly functioning odometer taken on January 1 and on December 31 of the compliance year.

Q: Planned Retirement Labeling - If we were planning to retire a 1990 Engine on December 31, 2014 can we still operate it without retrofitting it?

A: If the vehicle you are referring to is a school bus or any other private or federal fleet vehicle, it can continue to operate if it stays below the 1,000 mile limitation. Also, the vehicle must have a functioning odometer and records must be kept (if it is a private or federal fleet vehicle the mileage must be reported to ARB).

Q: I contacted head start about buses in our area that have been sitting idle for the past

couple of years, they told me they don't know at this time what they are going to do with them, but they are not compliant with the APCD regulations. If I were able to purchase one would I be exempt from any fines before I could get it equipped with a particulate trap?

A: School buses that are operated 1000 miles or less in a compliance year do not have to comply with the requirements for PM BACT (i.e. installing a diesel particulate filter.) Provided the mileage is less than 1000 miles, you should be able to drive an unused school bus to your site and to the dealer without being subject to fines.

Additional information that might be helpful is located in the "Changes in an Existing Fleet" section outlined in the Truck and Bus Regulation;

(A) Adding Vehicles to an Existing Fleet. Unless the vehicle is a 2007 model year or newer engine that meets PM BACT, a fleet may not operate a newly added vehicle or operate a vehicle that was previously reported as nonoperational in California, unless the fleet as newly constituted complies with the requirements of section 2025(e) and must within 30 days of adding the vehicle, file a report with the Executive Officer that it has added a new vehicle, and demonstrate that the fleet, as newly constituted, complies with the requirements of section 2025(o)(2)(C) below. If the vehicle added can comply by meeting PM BACT, the vehicle may be operated within 30 days of adding the vehicle to the fleet, solely for the purpose of having the vehicle's exhaust temperature data logged.

### **Low Use in Low Population Counties (Public Fleet Vehicles, not including school buses)**

Q: Low use and in low population county is 3000 miles and 150 hrs. correct?

A: Yes, under the Fleet Rule for Public Agencies and Utilities "Low-Population County Low Usage Vehicle" means a vehicle that is owned or operated by a municipality or utility located in a low-population county and is operated, based on a 5 year rolling mileage or engine hour average for fewer than 3000 miles or 150 hours, excluding mileage or engine hours used during snow removal operations. A vehicle that does not have a properly functioning odometer, tachograph, or other reliable device to measure usage may not qualify as a low-population county low usage vehicle.

Under the Truck and Bus Regulation, low use is 1000 miles in a compliance year.

### **Opacity Testing**

Q: Why are owners/school districts still required to test opacity?

A: The purpose of the Periodic Smoke Inspection Program is to ensure that all heavy-duty vehicles operating in California are properly maintained, tamper free and free from excessive smoke including school buses.

Opacity tests are needed for filtered engines to verify filter integrity. As PM slip (leakage) increases due to poor sealing between the filter and the housing (can) and/or if the filter cracks or otherwise slips PM, an opacity test would catch this.

Q: Why are we required to comply with periodic smoke inspections when everything has to be equipped with a DPF? This seems like a poor use of scarce funds.

A: Opacity tests are still needed for filtered engines to verify filter integrity. As particulate matter (PM) slip increases due to poor sealing between the filter and the housing (can) and/or if the filter cracks or otherwise slips PM, an opacity test would catch this. Right now there are two (2) opacity standards, 40% for '91 & newer engines, 55% for all other engines. There will likely be a new standard added for filtered engines.

### **Diesel Particulate Filters**

Q: You need to state that dpf's need to have opacity below 15% for it to work

A: Right now there are two (2) opacity standards, 40% for '91 & newer engines, 55% for all other engines. There will likely be a new standard added for filtered engines. Filtered engines that are smoking may be issued a citation for mal-maintenance.

Q: DPF's do not work as advertised. Is ARB investigating why DPF's require maintenance at significantly shorter durations than advertised?

A: If you are having trouble with your DPF, the DPF and Engine Maintenance handbook is a good start: [http://www.arb.ca.gov/msprog/truckstop/pdfs/dpf\\_handbook.pdf](http://www.arb.ca.gov/msprog/truckstop/pdfs/dpf_handbook.pdf)

If you continue to have issues please follow these steps;

Step 1: Contact your installer (most problems are resolved in this manner)

Step 2: Contact the device manufacturer (if the installer cannot resolve your complaint)

Step 3: Contact ARB at 866-6DIESEL or [8666diesel@arb.ca.gov](mailto:8666diesel@arb.ca.gov) (if the installer or manufacturer cannot resolve your complaint).

Q: Since ARB verifies the DPF's is ARB responsible if they don't work as advertised?

A: ARB's verification program ensures that emission reductions achieved by a control strategy are both real and durable and that production units in the field are achieving emission reductions which are consistent with their verification. The verification program also requires a minimum warranty be provided by the manufacturer.

Q: Is there a definition for 'periodic ash removal'?

A: The DPF is a maintenance item. It must be removed and cleaned periodically to

removes accumulated noncombustible ash from the filter. Ash removal is different and separate from regeneration. In general, DPF cleaning requires heating the filter, using compressed air combined with a vacuum system to blow the ash, and capturing it in a sealed container.

Q: Comment: Ash is considered a hazardous material, permits often required.

A: Ash captured by the DECS is considered a California hazardous waste and must be handled appropriately. ARB prepared a guidance document to assist end users who own, operate, or maintain DECS, with respect to managing ash generated by DECS or the disposal of spent DECS:

<http://www.arb.ca.gov/msprog/decsinstall/decshazardouswaste.doc>

Q: Can more frequent 'active' cleaning also be an indication of the DPF not working correctly?

A: If you are having trouble with your DPF, the DPF and Engine Maintenance handbook is a good start: [http://www.arb.ca.gov/msprog/truckstop/pdfs/dpf\\_handbook.pdf](http://www.arb.ca.gov/msprog/truckstop/pdfs/dpf_handbook.pdf)

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Q: Many of the filters are getting clogged very fast...many in less than 500 miles. The Safety of these students and medically fragile students are in jeopardy when these buses break down on the road or freeway or when the bus loses so much horsepower that the driver needs to pull off the road. Is this being addressed at any level at ARB?

A: If you are having trouble with your DPF, the DPF and Engine Maintenance handbook is a good start: [http://www.arb.ca.gov/msprog/truckstop/pdfs/dpf\\_handbook.pdf](http://www.arb.ca.gov/msprog/truckstop/pdfs/dpf_handbook.pdf)

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## **Sales Disclosure**

Q: Please send me the Sales Disclosure requirements.

A: The requirements are specified in title 13, California Code of Regulations, section 2025 which directs the seller to make the following text available to the buyer:

“An on-road heavy-duty diesel or alternative-diesel vehicle operated in California may be subject to the California Air Resources Board Regulation to Reduce Particulate Matter and Criteria Pollutant Emissions from In-Use Heavy-Duty Diesel Vehicles. It, therefore, could be subject to exhaust retrofit or accelerated turnover requirements to reduce emissions of air pollutants.” Here is a link to Advisory Number 416: Truck and Bus Regulation Disclosure and Record Keeping Requirements:  
<http://www.arb.ca.gov/enf/advs/advs416.pdf>.

Vehicles that are being sold by a Public Agency or Utility must follow a specific process for vehicle retirement, more information can be found on the Public Agency and Utility Regulation vehicle retirement webpage:

<http://www.arb.ca.gov/msprog/publicfleets/retirement.htm>

Q: Can a dealer sell a bus in California that has not been retrofitted?

A: Yes. The seller would need to provide a disclosure in writing to the buyer notifying them the bus may be subject to California Air Resources Board Regulations. Here is a link to Advisory 416 which provides more details on disclosure requirements:

<http://www.arb.ca.gov/enf/advs/advs416.pdf> The buyer is responsible for compliance with applicable ARB Regulations.

### **Small Fleet Exemption**

Q: Small fleet exemption?

A: There is a small fleet exemption under the Truck and Bus Regulation. This provision does not apply to vehicles that meet the CVC section 545 definition of school bus. For more information on the small fleet provision, please follow this link:

<http://www.arb.ca.gov/msprog/onrdiesel/documents/FAQsmall.pdf>

### **Public Utility Fleets**

Q: What are the requirements for Municipal trucks?

A: Municipal trucks would be subject to the Public Agency and Utility Regulation. This regulation effects on-road diesel fueled vehicles greater than 14,000 pounds gross vehicle weight rating powered by a 1960 through 2006 model year heavy duty diesel engine owned, leased or operated by a municipality or a utility. Some 2007 and newer engines that do not meet the 0.01 grams per brake horsepower-hour (g/bhp-hr) standard are also subject to this regulation. The regulation requires a municipality or utility to apply Best Available Control Technology (BACT) according to a specific compliance schedule.

## **Public Utility Fleets Vehicle Labels**

Q: If there is no room on the driver's door, could it go on the pass side door?

A: Yes, the Public Agency and Utility regulation specifies that the "label must be affixed to the driver's side door jamb, or another readily accessible location known to the driver of each vehicle."

Q: Planned retirement labeling?

A: Here is a link to the "compliance tools" page on the Public Agency and Utility Regulation website: <http://www.arb.ca.gov/msprog/publicfleets/compliancetools.htm>. The second bullet is a link to example vehicle labels, including planned retirement.

## **Funding**

Q: Is there any grant money available to purchase PM filters for publicly owned school buses?

A: San Joaquin Valley Unified Air Pollution Control District operates the Statewide School Bus Retrofit Program provides assistance for school districts with early compliance of ARB's in-use Truck and Bus Regulation that gets yearly funding from the federal government. You may also inquire directly with your local air district about opportunities for funding through other programs administered by the air district.

Q: There is not current sufficient funding to replace and retrofit school buses in CA to comply with the current ARB regulations. How does ARB plan to address this issue? If you believe that sufficient funding exists, please forward the information so I can pass it along to our industry.

A: ARB continues to apply to the State Budget process for additional funding to fulfill the remaining need in the small and medium air districts.

Q: Good morning, CARB needs to consider an option for fleets that have been proactive and have previously met compliance dates previously established and henceforth changed. That option being the ability to "re-retrofit" school buses with newer & better DPF equipment. For example, in 2007 the only CHP verified level 3 DPF for on road school buses was the "Cleaire" device. Our District retrofitted 34 buses at that time. Those units have met the five year reporting requirement to our local air district. The majority of those 34 units are older 3116 CAT engines with over 200,000 miles on each. Even with diligent preventative maintenance, the older, high mileage 3116 mechanically injected CAT engines coupled with the now defunct Cleaire product has produced a significant maintenance burden on our fleet. CARB needs to consider allowing funding for a newer type device to be installed on previously retrofitted buses.

A: ARB funds school buses to improve air quality. Diesel particulate filters on school buses, whether installed as a retrofit or installed by the OEM will need to be maintained and replaced when necessary by the owner.

## **Enforcement**

Q: Let's talk about enforcement. How is ARB going to handle this when a school district operates a vehicle that is not in compliance?

A: School district vehicles and school buses will be handled the same as other vehicles that are subject to the Truck and Bus Regulation. ARB Enforcement officers will verify that the buses have PM filters installed as required by the school bus phase in schedule.

## **TRUCRS ID**

Q: How do we as a district go about obtaining a TRUCRS ID number?

A: A school district does not need a TRUCRS ID number because there are no reporting requirements for school buses. If the school district has a white fleet, those vehicles would be subject to the Public Agency and Utility Regulation, which does not require reporting. Records must be kept for school buses and public fleet vehicles. The TRUCRS ID number is for privately owned vehicles that are subject to the Truck and Bus Regulation.

However, school bus owners applying for and being granted extensions for unavailability of VDECS will be asked to report the school buses with the extensions in TRUCRS for tracking purposes. Reporting is on-line at: <http://www.arb.ca.gov/msprog/onrdiesel/reportinginfo.htm> or forms can be completed and mailed to ARB for the information to be entered for them.

## **Engine Changes and VDECS Swapping**

Q: Can I pull the engine and particulate trap out of a school bus and install it into a different bus? The bus needs to be scrapped.

A: Engine changes are legal as long as the following requirements are met to ensure that the change does not increase pollution from the vehicle:

- The engine must be the same year or newer than the vehicle.
- The engine must be from the same type of vehicle (passenger car, light-duty truck, heavy-duty truck, etc.) based on gross vehicle weight.
- If the vehicle is a California certified vehicle then the engine must also be a California certified engine.
- All emissions control equipment must remain on the installed engine.
- Vehicles converted to 100% electric drive, with all power supplied by on-board

batteries are considered in compliance with the engine change requirements. All fuel system components must be removed prior to inspection. For additional information contact the ARB helpline at (800) 242-4450.

After an engine change, vehicles must first be inspected by a state referee station. The vehicle will be inspected to ensure that all the equipment required is in place, and vehicle will be emissions tested subject to the specifications of the installed engine.

Swapping and Re-designation for the retrofit device is allowed in some cases in accordance with the Policy Agreement located at:  
<http://www.arb.ca.gov/diesel/verdev/swap/swap.htm> .

### **Conversion Kits**

Q: If I have a 1988, 1989 school bus that is non retrofittable. Who do we go to and how can we get approval to install for say a alt. fuel injection system. As in a propane injection/diesel fuel system? This constitutes an engine modification to a School Bus and may not be permitted by CHP for safety insp. How can a certification be obtained? The injection system will most likely not need a filter and will pass an opacity meter test with no problem. Do we have anything in works for this? This will reduce NOx, less hazardous waste from ash. Less particulate over all. Some systems are even boosting power increases.

A: Currently there are no conversion kits that are legal in California. Additionally, a VDECS can only be installed on an engine with a modified injection system if the Executive Order for that device allows for it.

### **Certified "Clean Idle"**

Q: As a repair shop, how can I get certified to service my clients with a clean idle?

A: An engine can be modified to meet "Clean Idle" standards. This can be accomplished by "flashing" the computer (re-programming it). For some engines in some instances, authorized dealers can re-program engine computers to meet the 30 gram NOx standard for "clean idle" designation.

### **Waiver for Idling**

Q: Has the waiver for school bus idling for turbocharged buses been removed or not apply when at a school/residence when loading/unloading?

There is no waiver in the school bus idling regulation for turbocharged buses; however, an exemption under 13 CCR 2480(d)(4), allows three to five minutes of idling to cool down a turbo-charger, if needed. School buses are already allowed 5 minutes to idle when at residences.

For questions regarding the Airborne Toxic Control Measure (ATCM) to Limit School Bus Idling and Idling at Schools, please contact the program staff listed on the bottom of the web page at: <http://www.arb.ca.gov/toxics/sbidling/sbidling.htm>

## **Emissions Estimates**

Q: In 2008 ARB projected that in 2010 daily emissions would be 610 tons of NOX & 27 tons of PM. How does current emission compare to the estimate?

A: About the same time when the Truck and Bus Regulation first went to the Board in 2008, the National Bureau of Economic Research declared that the United States had entered an economic recession. As a result, ARB staff began to assess the impacts of the recession on emissions from trucks and buses and the revised emissions were include in the 2010 Truck and Bus Regulation ISOR. Initial Statement of Reasons (ISOR): <http://www.arb.ca.gov/regact/2010/truckbus10/truckbus10isor.pdf>

For a description of inventory updates including the impacts of recession, please refer to Chapter II, section A. For emissions estimates, please refer to Chapter VI, section B.

Additional information regarding the Mobile Source Emission Inventory can be found at: <http://www.arb.ca.gov/msei/msei.htm>

## **Low Carbon Diesel**

Q: Can you provide some insight into the new low carbon diesel fuel standard which will be required in CA? Cost, availability, Implementation date?

A: Here is a link to the low carbon fuel standard program background page: <http://www.arb.ca.gov/fuels/lcfs/lcfs-background.htm>. For more information on the low carbon fuel standard please contact program staff, here is a link to a list of contacts: <http://www.arb.ca.gov/fuels/contact.htm>

## **Webinar**

Q: Will this webinar be archived for later review?

A: Unfortunately, the May 9<sup>th</sup>, 2013 webinar is not available. However, the May 23<sup>rd</sup>, 2013 webinar is available at: <https://www1.gotomeeting.com/register/183714961>

Q: I'm disappointed that were spending such a significant amount of time on 'other' issue, rather than the school bus rule.

A: Many of the fleets that have logged onto the webinar have vehicles that must meet the other requirements we are covering.

Q: This information was not useful without the interaction of questions/answers available to all, while engaged in the meeting.

A: We apologize for the inconvenience, but we do not have the capability to have a chat room open to all attendees throughout the webinar at this point in time.

Q: How do we get information on the full day PM filter maintenance course?

A: Please see the information at:

<https://ssl.arb.ca.gov/training/courses.php?course=511>