



**REPORT ON WORKSHOPS**  
Held On October 2 and 7, 2008  
To Discuss  
Diesel Vehicle Smog Check Inspections

## Introduction

Assembly Bill 1488 (Mendoza, Chapter 739, Statutes of 2007) requires the Bureau of Automotive Repair (BAR) to include in the Smog Check Program, by January 2010, diesel-fueled (diesel) vehicles meeting certain model year and vehicle weight range criteria. This legislation requires the BAR to work in consultation with the California Air Resources Board (ARB) to create the diesel vehicle test procedures, and requires the Department of Motor Vehicles (DMV) to work in consultation with the ARB to identify vehicles for inspection.

At a minimum, AB 1488 requires that 1998 and newer vehicles with a gross vehicle weight rating (GVWR) of less than 8501 pounds be included in the Smog Check Program. In addition, the legislation requires the inclusion of diesel-powered vehicles less than 14,000 pounds GVWR once DMV determines the best method for identifying these vehicles, and ARB/BAR implement applicable test procedures. After working with the DMV and the ARB, the three agencies agreed that it would be most cost effective to include diesel vehicles up to 14,000 pounds GVWR so that program changes could be made all at once. This will result in significant cost savings to the State because DMV will only have to make changes to the system once, and emission benefits will be realized to the State sooner.

The bill indicates that the test will, at a minimum, consist of visual checks of the emission control systems (ECS), and an On Board Diagnostics (OBD) test. In addition, AB 1870 (Lieber, Chapter 761, Statutes of 2006) requires a visible smoke test.

Like gasoline-fueled (gasoline) vehicles, the newest four model-years will not be required to obtain a Smog Check inspection in order to register a vehicle when ownership changes. However, unlike gasoline vehicles, the newest six model-years of diesel vehicles will be required to obtain a biennial Smog Check inspection. It is estimated that approximately 540,000 diesel vehicles will be registered in California and subject to this program in calendar year 2010. DMV will begin sending notifications in January 2010 to registered owners of diesel vehicles with Vehicle Identification Numbers (VIN) ending in even numbers, and the VINs ending in odd numbers will be sent the following year beginning in January 2011.

Minor changes to the BAR-97 Emissions Inspection System (EIS) software will be required in order to perform diesel Smog Check inspections by January 2010. The BAR will be contracting with the EIS manufacturers to make the necessary changes to the analyzer software at no cost to stations.

## Workshop Presentation

**BAR's presentation** at the workshops provided details on AB 1488, DMV notification, inspection and test procedures and what will happen next. The information presented at the four workshops is outlined below:

### Purpose of Workshops

- Provide an overview of diesel-powered vehicles inclusion into the Smog Check Program.
- Obtain input on new diesel inspection program and procedures.

### Program Background

Why are diesel emissions a concern?

- Diesel Particulate Matter (PM) is a Toxic Air Contaminant (TAC)
- Increased health risks – respiratory problems, asthma, cancer, premature death
- Diesel reactive organic gases (ROG) and oxides of nitrogen (NOx) contribute to the formation of ozone.

## **Overview of AB 1488**

Estimated diesel vehicle population subject to the Smog Check Program for calendar year 2010 is 540,000 vehicles.

AB 1488 requires:

- Model year 1998 and newer diesel-powered vehicles under 14,000 lbs GVWR to be included in the Smog Check Program
- Inspections for change of vehicle ownership
- Inspection of "Out of State" vehicles
- Testing to begin in January 2010
- Statewide implementation of diesel testing
- ARB/BAR to develop inspection procedures

## **Implementation of AB 1488 – Registration**

- DMV registration renewal notices will indicate whether an inspection is required.
- DMV will begin notification January 2010.
- Diesel change-of-ownership will require inspections beginning January 2010.
- Approximately half of the diesel vehicles subject to inspection will obtain a Smog Check each year.
- Biennial inspections will be split the first two years.
- Vehicles changing ownership will add to the biennial inspection volume.

## **Implementation of AB 1488 – Test Procedures**

BAR has been working with the ARB to develop inspection procedures that will include a:

- Visual test
- OBD test
- Visible Smoke test

## **Implementation of AB 1488 – Equipment Update**

- No new inspection equipment will be required.
- BAR will be contracting with EIS manufacturers to update and install the needed software.
- The BAR-97 analyzers will be able to perform the OBD test on all non-CAN vehicles.

## **Implementation of AB 1488 – Technician Training**

Diesel-specific inspection training material will include:

- EIS Operation
- Visual Testing
- OBD Testing
- Visible Smoke Testing

The training will be made available to all technicians.

## **Additional Program Information – Consumer Assistance Program**

- Owners of diesel-powered vehicles may be eligible to participate in the Consumer Assistance Program.
- Consumer incentive remains the same:
  - o For repair assistance up to \$500
  - o For vehicle retirement \$1,000

## **Next Steps**

- Publish workshop summary and schedule on BAR Web site
- Comments will be accepted through October 31, 2008
- Develop regulations
- Forty-five day public comment period on proposed regulations
- Regulatory hearing
- January 2010 implementation

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## **Summary of Questions and Comments at the Workshop**

The workshops were attended by members of the inspection and repair industry, vehicle/engine manufacturers, car dealerships and owners of diesel repair specialty shops. Questions and comments discussed at the workshops are summarized below. Additional information (including FAQs) will be updated on the BAR's Web site as it becomes available.

### **Diesel Inspection Procedures**

Participants at the workshops asked a number of questions about the diesel inspection procedures that legislation requires the BAR and ARB to develop. The test will consist of three parts; a visual inspection of required emission control equipment, a check of the OBD system and a test for visible smoke.

All of these tests are currently performed on gasoline engines. However, there are some differences as indicated below:

- The visual inspection for emission control equipment will be performed in the same way the gasoline test is performed except that some diesel vehicles are equipped with slightly different emission control equipment.
- The OBD-II check on diesels will be conducted exactly the same way it is performed on gasoline vehicles. The BAR-97 cannot perform the OBDII check for any vehicles with the newer Controller Area Network (CAN) OBD communication protocol. Some diesel vehicles started using the CAN protocol as early as the 2003 model-year. BAR plans to have BAR-certified equipment that will be able to inspect CAN systems within a few years.
- The BAR and the CARB are working on a new visible smoke test procedure for diesels. Once the studies regarding the smoke procedure are complete, and the draft procedures are written, they will be posted on BAR's Web site.

Several station operators suggested that the BAR should require an opacity meter to measure smoke to avoid having a motorist challenge a station for failing a vehicle for excessive smoke. Currently, the State does not have any plans to require stations to purchase opacity meters.

No tailpipe emissions measurement test or dynamometer testing are planned for the implementation of the diesel inspection in January 2010.

One of the workshop participants asked if the BAR is considering having Smog Check technicians collect fuel samples since diesel vehicle owners occasionally use alternative fuels, like biodiesel. Although the BAR recognizes that alternative fuels can affect diesel emissions, no fuel samples will be required as part of the inspection.

Workshop participants asked how long the diesel inspection would take. The BAR indicated that although many factors affect the length of time it takes to do any type of inspection, the BAR expects most technicians to complete the diesel inspection in approximately 10 minutes.

Some participants raised concerns about exposure to diesel PM. The BAR always looks for ways to minimize the length of time a vehicle has to run during an inspection. The only time the engine will have to run during the diesel inspection is during the visible smoke test.

## Subletting

Participating members of industry specializing in diesel repairs indicated that repairs on diesels will be more costly than they are on gasoline vehicles. A number of participants asked how the BAR expected failed vehicles to be repaired and if subletting would be allowed? Currently subletting of repairs is not allowed when a vehicle fails a Smog Check, except under certain conditions (i.e., parts removed from vehicle, or exhaust system repairs). The BAR is reviewing options for diesel repair and will provide further information during the regulatory process.

## Test-Only Direction

The BAR will not be directing diesel vehicles to Test-Only stations when the program begins in January, 2010. If vehicles are directed later, it will have minimal impact on the industry because of the relatively small volume of diesel vehicles compared to gasoline vehicles.

## Tampering, Engine Changes

The ARB advised workshop participants that diesel vehicles subject to this program have been certified to meet strict emission control requirements by the United States Environmental Protection Agency (USEPA) and the ARB.

Industry participants estimated that 50% of the diesel vehicles they currently service have been modified with aftermarket devices, oversized tires, etc. The ARB indicated that they cannot control tires, but Smog Check technicians will be required to fail vehicles with modified emission control equipment that have not been approved by the ARB. Approved devices will have a label with an ARB Executive Order number on it.

Workshop participants asked if the ARB gasoline replacement catalytic converter requirements would apply to diesels. The ARB agreed to check if it applies as is or if it needs to be modified to avoid the installation of cheap, inferior catalytic converters on diesel vehicles.

Some participants asked if the BAR could make a Web site available to help technicians identify which equipment is illegal. Information about which aftermarket equipment devices are approved by the ARB is already available from their Web site at <http://www.arb.ca.gov/msprog/aftermkt/devices/amquery.php>. Technicians can search either by the manufacturer's name or by the Executive Order number assigned to the device by the ARB if it is labeled on a vehicle.

## The Consumer Assistance Program (CAP)

Questions were raised at the workshop about assistance for motorists who fail an inspection. The BAR indicated that the CAP offers two options for consumers whose vehicles fail their biennial Smog Check. Motorists may be eligible for either repair assistance or the vehicle retirement program. Repair Assistance allows qualified consumers to receive financial assistance toward emissions-related repairs up to \$500 to help their vehicles pass a Smog Check inspection. Eligible consumers can also receive \$1,000 to retire their high-polluting vehicle. The vehicle must pass a visual and operational inspection before it is retired.

## Manufacturer Warranty Coverage

Participants asked if the emission warranties provided for diesel and gasoline powered vehicles are different. Stations should inform motorists that they can check their owner's manual to determine what coverage they were provided by the manufacturer. The BAR indicated that they will consider providing some general warranty information to the industry.

## Station Licensing, Technician Licensing, Gold Shield Requirements

Members of the test and repair industry at the workshop asked if the BAR intends to establish new license requirements for diesel inspections or repairs. The BAR is reviewing options for technician licensing and will provide further information during the regulatory process.

Workshop participants asked if diesel repairs would help a station qualify to meet the criteria to become a Gold Shield station. The BAR has held several informational workshops regarding the criteria for Gold Shield stations over the past several months. Information about the workshops can be viewed on the BAR's Web site at:

[http://www.smogcheck.ca.gov/80\\_BARResources/05\\_Legislative/RegulatoryActions/GSWorkshopInf.html](http://www.smogcheck.ca.gov/80_BARResources/05_Legislative/RegulatoryActions/GSWorkshopInf.html)

## Training

Participants attending each of the workshop sessions raised questions about the need for training materials aimed at diesel inspections and repairs. The BAR is reviewing options for diesel training and will provide further information during the regulatory process.

## Implementation Schedule and Other Miscellaneous Questions

Some participants at the workshops were curious why 1998 was established as the minimum model-year vehicle subject to the program. The law, as written, authorizing the inclusion of diesel vehicles into the Smog Check Program, required it.

Participants asked if any diesel vehicles will be exempt from the program, like motor homes. The BAR and ARB stated that all diesel vehicles meeting the model-year and GVWR criteria will be subject to the program. This may include some small motor homes, but most are over the maximum 14,000 GVWR limit.

A question was raised about what other states are inspecting light-duty diesel vehicles. The BAR indicated that Nevada, New York and Colorado are among the other states that have implemented diesel inspection programs.

## BAR Actions since the Workshops

The following actions have occurred or are in progress since the workshops were held:

- Testing at ARB and roadsides has resumed;
- Drafting regulations; and
- The BAR-97 software update for diesel testing is progressing.

## Next Steps

Regulatory hearings are projected for spring 2009. Notification to interested parties will occur in early 2009.