September 22, 2010

TO: All Interested Parties

DATE: September 22, 2010

SUBJECT: REPLACEMENT OF MSC 08-30: FAILURE OF COMPONENT(S) OF A VERIFIED DIESEL EMISSION CONTROL STRATEGY PAST THE WARRANTY PERIOD, EFFECTS ON THE REPLACEMENT, AND REASSIGNING BEST AVAILABLE CONTROL TECHNOLOGY

This advisory replaces advisory MSC 08-30 issued on October 10, 2008. The purpose of this advisory is to define a failure of a verified diesel emissions control strategy (DECS) that no longer meets the criteria for best available control technology (BACT) for particulate matter (PM), and to clarify the actions to repair the DECS (when the DECS is no longer under warranty) in order to meet BACT, as defined by applicable in-use diesel engine regulations.

California Code of Regulations, title 13, section 2707, of the Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines specifies the warranty requirements, including the warranty period, that any person or company producing and/or installing a DECS must fulfill for the product and its installation. DECS are verified to 3 “Levels”, Level 1 having the lowest level of PM control and Level 3 having the highest. In applicable in-use diesel engine regulations, the vehicle or equipment owner is required to install the highest level (Level 3) verified DECS appropriate to their engine, when available, prior to considering the installation of the next lower level verified DECS.

If a DECS requires repair or has failed during the warranty period (regardless of whether the repair or replacement was the responsibility of either the manufacturer or the owner), the vehicle or equipment owner has the option of either, repairing the DECS (including replacing the failed components with components from the same DECS family name) or replacing the DECS with a currently verified DECS at the same or higher Level. If the DECS is no longer verified, the replacement parts must have an aftermarket parts exemption to legally be sold and installed.

For DECS that fail or are in need of repair after the warranty period, the appropriate action is dependant upon a number of circumstances. Below are three scenarios that...
discuss actions to be taken by the vehicle or equipment owner upon failure of a DECS after the warranty period to meet the applicable requirements.

Scenario 1: The failed DECS is not the highest level DECS at the time of failure.

Currently, some fleets have placed on their vehicles or equipment Level 1 and Level 2 DECS, because it was allowed by the applicable regulation and it was determined that these were the highest level verified DECS at the time of installation. If a verified Level 1 or Level 2 DECS fails after the warranty period and it is not the highest Level DECS at the time of failure, as required by the appropriate regulation, the DECS must be assessed for replacement. Failure of a core component such as a device substrate (diesel oxidation catalyst or flow-thorough-filter, nitrogen oxides catalyst, selective catalytic reduction, etc.), fuel additive dosing system, and/or electronic control element/module is a failure of the DECS and requires complete system replacement; no repairs are allowed. If the Level 1 or Level 2 DECS has failed and requires replacement (i.e. failure of a core component), it must be replaced with the highest level currently verified DECS.

Non-core components of a Level 1 or Level 2 can be replaced but it is essential to evaluate the component failure with its affect on the overall performance of the DECS. The manufacturer or manufacturer representative (installer) must certify that the device is working per verification requirements with the component change, and the broken component has not resulted in damage to any of the core components listed above. The vehicle or equipment owner will need to work closely with, and obtain the appropriate documentation from, the installer to demonstrate that the repair did not lower or affect verified performance of the DECS.

Scenario 2: The failed DECS is a Level 3 or the highest level applicable to their engine at the time of failure and is currently verified.

The vehicle or equipment owner can repair the DECS (including replacing the entire system with components from the same DECS family name) or replace the DECS with a currently verified DECS at the same or higher Level.

Scenario 3: The failed DECS is a Level 3 or the highest level applicable to their engine at the time of failure, but is de-verified (no longer meets the criteria for verification and no longer can be sold or installed as a verified DECS).

A vehicle or equipment owner can replace failed components with new replacement components from the same DECS family name, provided the parts are still available and have an aftermarket parts exemption for sale or installation. At no time can a
DECS be repaired using components that are not originally verified components for that DECS family. If the components are no longer available, the owner will need to replace the entire system with a currently verified DECS.

Should you have any questions about this advisory, please contact Ms. Kathleen Mead, Manager, at (916) 324-9550 or email at kmead@arb.ca.gov.

Sincerely,

Robert H. Cross, Chief
Mobile Source Control Division

cc: Kathleen Mead, Manager
Retrofit Implementation Section