

# Memorandum

**To** : Kim Heroy-Rogalski, P.E.  
Manager, Off-Road Implementation Section  
California Air Resources Board

**Date** : January 6, 2010

**From** :  Occupational Safety and Health Standards Board  
Marley Hart, Executive Officer

**Subject** : **Retrofitting Vehicles Without Creating Masking**

The California Air Resources Control Board (ARB) in-use off-road diesel vehicle regulation requires, among other things, that fleets in California install exhaust retrofits on off-road diesel vehicles. To prevent these retrofits from being installed in a manner that impairs visibility, the ARB and the Division of Occupational Safety and Health (CalOSHA) released an interim visibility policy on October 21, 2009. The interim policy states that off-road vehicles will be exempted from retrofit for the March 1, 2010, requirements if a retrofit cannot be installed without impairing visibility to the front, sides, or rear of the vehicle.

ARB, CalOSHA and Standards Board staff are working to develop an objective test method to identify and measure masking. 'Masking' means the area around a vehicle that an operator could see before the retrofit is installed, but cannot see after the retrofit is installed. When the test method is finalized, staff will conduct field tests to quantify the masking that would result from retrofits and evaluate the amount of masking that should be allowed, if any. The results of these field tests will be used by Occupational Safety and Health Standards Board (Standards Board) staff to develop proposed amendments to the CalOSHA standards, which are anticipated to be noticed for public hearing in the summer of 2010.

ARB is releasing a guide, "Retrofit Visibility Masking and 2010 Exemptions", that instructs fleets and installers how to retrofit vehicles without creating any masking at all, and how to go about claiming an exemption from the retrofit requirements for vehicles where a retrofit cannot be installed without creating masking. CalOSHA and the Standards Board have reviewed the ARB guide and it is our opinion that retrofits that are installed in accordance with the guide should not create any masking and therefore with respect to masking it is expected that these retrofits will be in compliance with the proposed amendments to the CalOSHA standards that the Standards Board staff develop.

cc: Len Welsh, DOSH  
Mike Donlon, DOSH  
Mike Manieri, OSHSB  
Tom Mitchell, OSHSB