

Maryland Clean Cars Act of 2007

Summary of Proposed or Adopted Changes to the
California Low Emissions Vehicle Program by the California
Air Resources Board (CARB)

2009 Report Period
September 5, 2008 through September 1, 2009

Submitted to the
Joint Committee on Administrative, Executive, and Legislative Review
(AELR)



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The following report summarizes changes to the California Code of Regulations (CCR) sections that were incorporated by reference by the Maryland Department of the Environment (MDE) in developing regulations to administer the Clean Cars Act of 2007. All changes that impact Maryland regulations are listed although very few will result in any changes in program implementation. The following resources were used to determine changes to the California regulations:

- The California Code of Regulations (CCR), as posted on the California Office of Administrative Law website <http://government.westlaw.com/linkedslice/default.asp?Action=TOC&RS=GVT1.0&VR=2.0&SP=CCR-1000>,
- The California Air Resources Board's (CARB's) inventory of regulatory activities as posted on the agency's website <http://www.arb.ca.gov/regact/regact.htm>, and
- The California Regulatory Notice Register, as posted on the California Office of Administrative Law (OAL) website <http://www.oal.ca.gov/notice.htm>.

As this report builds on the 2008 report, changes identified but not finalized at the time of publication of the previous report are reviewed along with additional changes initiated since publication of that report. Changes in the California program that were final at the time of the 2008 report are not repeated in this report. The 2008 report included changes up to September 4, 2008, so this report includes information published between September 5, 2008 and September 1, 2009. The changes are listed in order by status, with finalized changes listed first.

1. ZEV (Zero Emission Vehicle) Requirements

Status: Final (effective April 17, 2009, included but not final in 2008 AELR report)

This rulemaking amends the Zero Emission Vehicle (ZEV) program in a number of ways. It lessens the projected number of required Zero Emission Vehicles (ZEVs) required of large volume manufacturers from 25,000 during model years 2012–2014 to 7,500, and from 50,000 during model years 2015–2017 to 25,000. It offers manufacturers an alternative path toward compliance with the ZEV program by awarding credits for production of various categories of Partial Zero Emission Vehicles (PZEVs) in satisfaction of a portion of large manufacturers' market–share–based ZEV production obligations. The rulemaking also includes phase–in credit multipliers for introduction of certain new vehicles, credits for ZEV or PZEV production that is part of transportation systems involving shared use of vehicles and linkages to mass transit, provisions for sale of credits by small manufacturers to large manufacturers, provisions for how total production is calculated, carry–forward and carry–back credit provisions, credits for Advance Technology PZEVs placed in other states which have adopted the California ZEV program, and requirements for publication of production data and ZEV credit bank balances.

The purpose of this change was to allow the manufacturers more flexibility in meeting the ZEV requirements. As in the past, California has continually modified the Low Emission Vehicle program to reflect current technologies. Currently fuel cell technology is not where it was projected to be when these regulations were developed so California has modified them to reflect what is achievable by allowing fuel cell vehicles to be offset by plug-in hybrid vehicles. As noted above, if manufacturers choose this option Maryland and other section

177 states could see far less fuel cell vehicles in their states. However, this would be offset by the early introduction of an additional 58,000 plug-in hybrids in 2012-2014 and 83,000 in 2015-2017. This will allow more consumers to purchase these technologies and could potentially result in an increase in environmental benefits.

The changes to the ZEV requirement are included in the regulatory revisions being undertaken by MDE to update the incorporation by reference provisions of the program.

2. Heavy Duty On-Board Diagnostics (HD OBD) Regulation

Status: Under Review (public hearing was held on May 28, 2009)

The Air Resources Board is reviewing the On-Board Diagnostic System Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines (OBD II) and Heavy Duty Engines On-Board Diagnostic System Requirements (HD OBD) requirements. Although the majority of the changes will impact medium and heavy-duty vehicles (which are not part of Maryland's Clean Cars program), they will also affect some light duty vehicle regulations. The majority of the regulatory changes are focused on diesel vehicles, particularly on monitoring newer emissions control devices such as urea-injection systems. The regulations are also being reviewed to improve the consistency between medium and light-duty vehicle OBD systems.

This change is needed to reflect the changes in technologies that are being implemented in the medium to heavy-duty vehicle category. In order to meet the new EPA emission standards required in 2010, most diesel vehicles will utilize urea injection systems. Therefore California has implemented new changes in the OBD systems to reflect this new technology. This change will benefit both the consumer and the environment in that it will allow better monitoring of these systems to ensure they are operating efficiently and as intended.

3. Plug In Hybrid Test Procedures

Status: Under Review (public hearing was held on January 23, 2009)

A number of companies offer kits for certain hybrid vehicles that convert the vehicle into a plug-in hybrid electric vehicle. However, these kits can affect emissions (including the potential for much higher emissions due to low catalytic converter temperatures) which constitute illegal tampering with emissions control devices. The Air Resources Board considered staff's proposed regulations for the certification of PHEV conversion systems and emission test procedures applicable to PHEVs.

This change was needed to protect both the consumer and the environment. By establishing standardized test procedures California is ensuring that any plug-in hybrid conversion kit will be both reliable and not negatively affect the vehicle's emissions. A similar situation occurred in the 1990's when EPA established strict standards for alternative fuel conversion kits. Many of the kits at the time were unreliable and actually increased vehicle emissions. Currently only a few plug-in hybrid conversion kits exist. By establishing these new test procedures California has made sure that what happened with alternative fuel conversion kits will not happen with plug-in conversion kits.

4. National Greenhouse Gas Standards

Status: To be Determined

In May 2009, the US EPA and NHTSA collaborated with the ARB to announce the joint development of a national greenhouse gas standard for light-duty vehicles. A major component of Maryland's Clean Cars Program was the adoption of California's greenhouse gas standards. The EPA approved California's waiver request on June 30, 2009, allowing California, and likewise Maryland, to enforce the greenhouse gas standards. However, California has agreed to amend its greenhouse gas regulations to allow compliance with the federal standards to satisfy compliance with California standards. The federal standards begin taking effect in 2012. Although the federal standards take effect later than California's proposed standards, by making a national standard, the total greenhouse gas reductions will be much greater than the reductions from just the Clean Cars states.

This change addresses the automobile manufacturers' primary opposition to the program of having to produce different cars for the different parts of the country. Now there is truly just one national car that needs to be produced which should reduce cost for the auto manufacturers as well as make compliance easier. As noted above, since the new national program has a slower phase-in period, Maryland and the other CALEV states will see a slight reduction in GHG emission reductions. However, this reduction will be far outweighed by the reductions achieved nationally by all fifty states.

The Maryland Program will have to be updated once California completes this future rulemaking.