



**Linda S. Adams**  
Secretary for  
Environmental Protection

# Air Resources Board

**Robert F. Sawyer, Ph.D., Chair**  
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El Monte, California 91731 [www.arb.ca.gov](http://www.arb.ca.gov)



**Arnold Schwarzenegger**  
Governor

January 23, 2007

Mail-Out #MSO 2007-01

**TO:** ALL PASSENGER CAR MANUFACTURERS  
ALL LIGHT-DUTY/MEDIUM-DUTY VEHICLE MANUFACTURERS  
ALL HEAVY-DUTY VEHICLE MANUFACTURERS  
ALL MOTORCYCLE MANUFACTURERS  
ALL OTHER INTERESTED PARTIES

**SUBJECT:** NOTICE OF PUBLIC WORKSHOP REGARDING PROPOSED  
AMENDMENTS TO THE PROCEDURES FOR REPORTING FAILURES  
OF EMISSION-RELATED COMPONENTS AND CORRECTIVE  
ACTIONS; SUPPLEMENT TO THE INITIAL STATEMENT OF REASONS

## I. Introduction

This notice announces that the staff of the Air Resources Board (ARB or Board) will conduct a workshop on February 14, 2007 at ARB's El Monte facility on additional modifications to proposed amendments to ARB's regulations on procedures for reporting failures of emissions-related components and corrective actions. Proposed amendments on this topic were initially considered by the Board at a December 7, 2006, hearing, and staff plans to present the modified amendments for the Board's consideration at a hearing on March 22 or 23, 2007, in Sacramento.

At the December 7, 2006 hearing, the Board considered amendments designed by staff to improve California's emission warranty information reporting and recall regulations and emission test procedures. Staff identified three aspects of the existing regulation that needed improvement, specifically: (1) the proof required to demonstrate violations of ARB's emission standards or test procedures, (2) the corrective action available to ARB to address the violations and, (3) the manner in which emissions warranty information is reported to ARB. The objective of the proposed amendments is to obtain more corrective actions to more vehicles that have systemic defective emission control devices or systems, when compared to the current regulations.

During the 45-day comment period prior to the December hearing staff continued to meet with industry and stakeholders, as it had done before the comment period. These discussions lead to the development of additional changes to the staff proposal which were presented to the Board as concepts at the hearing. The Board heard testimony from 14 representatives from the motor vehicle manufacturing industry, the

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automotive aftermarket industry, and the independent service and repair industry all who raised concerns with the staff proposal. Several witnesses asked the Board for a delay on their consideration of this item. Testimony in favor of the staff proposal was provided by the Sierra Club and the South Coast Air Quality Management District.

The witnesses in opposition to the regulatory proposal made certain claims which are summarized in nine main points as follows. Witnesses claimed that:

- (1) The staff's proposal lacked the legal authority to impose corrective actions on violations not linked to exceedances of emission standards,
- (2) The staff did not provide industry and stakeholders sufficient time to fully realize and comment on the October 20, 2006 staff proposal,
- (3) The staff did not provide industry and stake holders sufficient time to respond to the proposed conceptual changes developed during the 45 day process and presented at the December 7, 2006 hearing,
- (4) The staff's proposal did not provide for a hearing process for corrective actions other than recall,
- (5) The staff's proposal lacked the legal authority to mandate extended warranties as a corrective action, especially beyond the useful life of the vehicles,
- (6) The staff's proposal did not provide special consideration for the motorcycle industry since their warranty period is already equal to the useful life,
- (7) The staff proposal did not provide delays to the proposed warranty reporting program for the heavy duty-industry since OBD will not be fully integrated until 2016 and new NOx after-treatment technology will be implemented in the 2010 model year,
- (8) The staff's proposal did not address for potential monetary impacts on the aftermarket service and parts industry resulting from extended warranties for failing components, and
- (9) The staff did not provide sufficient consideration to industry's alternative proposals.

Some witnesses commented that if additional time were given they believed resolution to most outstanding issues could be reached and requested additional time to work on the proposal with staff. The Board agreed that additional time could be helpful. The Board emphasized that the proposal presented by staff at the December hearing is on the correct path for addressing systemic emission component failures and the decision to continue the item to a future date was not intended to result in a restructuring or change in the scope of the proposal.

Accordingly, the hearing date for the item has been continued to the Board's hearing scheduled for March 22-23, 2007 and staff is conducting additional industry meetings in combination with a workshop at the time and place listed below to allow

additional participation by stakeholders in the final proposal. The staff's revised regulatory and test procedure proposal is contained in Attachment A and B respectively. Specific regulatory language for each of the proposed additional concepts presented at the hearing have been incorporated along with additional changes in response to hearing testimony. This notice also serves as a supplement to the Initial Statement of Reasons (ISOR) released on October 20, 2006, for these proposed changes. The reader is encouraged to reference the entire ISOR at <http://www.arb.ca.gov/regact/recall06/risor.pdf> for additional information.

## **II. Changes to October 20, 2006 Proposal**

### **A. Concepts Presented at the December 7, 2006 Hearing**

After release of the initial proposal on October 20, 2006, and several discussions with industry, staff drafted additional conceptual changes that were presented to the Board as 15-day changes on December 7, 2006 as an attempt to address many stakeholder concerns (see Attachment C). It was anticipated that staff and industry would work on the final regulatory language subsequent to the hearing provided the board adopted the conceptual language. However industry, as well as the Board, felt the final regulatory language should be developed and presented for consideration at a future date prior to the continued hearing. The original concepts presented at the hearing are listed below along with staff's proposed actions and which main points identified in the previous section they relate to.

- 1) Manufacturers commented that the proposal did not allow for delays in submitting corrective action plans. Staff agreed legitimate reasons could exist for a delay in submitting corrective action plans provided good cause was shown. Regulatory language has been added that allows manufacturers to request a delay in the submission of a corrective action plan provided good cause is shown and approved by the Executive Officer. (See proposed Section 2172 and 2172.2 in Attachment A.)
- 2) Manufacturers commented that the proposal did not allow for consideration to eliminate warranty claims that were generated as a result of an "infant mortality" defective component situation. Staff acknowledges that infant mortality cases do occur and should be addressed as a special case. Regulatory language has been added to address infant mortality warranty issues provided appropriate corrective action is implemented and satisfactorily completed very early in the warranty period of the affected vehicles or engines. It should be noted that manufacturers must continue to monitor and report Emission Warranty Information Reports (EWIR) as necessary, and corrective action may be required if the failure rate threshold is exceeded. (See proposed Section 2168(b) in Attachment A.)

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- 3) Manufacturers commented that the proposal did not allow for consideration to eliminate warranty claims that were generated as a result of a voluntary recall. Staff acknowledges that this consideration should be included in the proposal similar to that of the infant mortality issue. Regulatory language has been added to allow a manufacturer to voluntarily initiate corrective action for defects that it wishes to correct before any trigger is exceeded. In such a case, the manufacturer may eliminate only these components from the EWIR or Supplemental Emission Warranty Information Report (SEWIR). However, if the recall applies to a subgroup of vehicles, the non-affected vehicles are still subject to reporting requirements and possible corrective action. Also, the replacement components must begin their own tracking process. (See Proposed Section 2168(c) in Attachment A.)
- 4) The heavy-duty vehicle and engine manufacturers commented that the proposal should allow “light-heavy” duty engines to be considered in the medium-duty category when determining extended warranty time and mileage periods. Staff originally agreed with industry; however, the Board discussion suggested that the extended warranty time and mileage periods should not exceed the certified useful life period. As a result the staff has added regulatory language that limits the extended warranty period to equal the applicable useful life period for all vehicle and engine categories as they were certified. (See proposed Section 2166.1(j) in Attachment A; This relates to Main Point 5 discussed above.)
- 5) The heavy-duty vehicle and engine manufacturers commented that the proposal lacked specific definitions for the terms “defective emission-control component” or “defective emission-related component.” Staff agrees and regulatory language has been added to define those terms. (See proposed Section 2166.1(e) in Attachment A.)
- 6) Manufacturers commented that the proposal required a new “demonstration” during certification that a manufacturer’s vehicles or engines would not exceed the four percent warranty failure rate during its useful life period. Staff acknowledges that a demonstration beyond what is already required by new engine or vehicle certification was not staff’s intent. The proposal has been revised to only require a statement of compliance that based on good engineering judgment and information available at the time of certification the parts will be durable for the full useful life and will not exceed the four percent warranty claim rate during the warranty reporting period. The staff added additional language clarifying the requirement and relating it to Health and Safety Code section 43106. (See proposed Test Procedures in Appendix B.)
- 7) The heavy-duty vehicle and engine manufacturers commented that the proposal lacked specific definitions regarding for the terms “emission-control component” or

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“emission-related component.” Staff agrees and regulatory language has been added to define those terms. (See proposed Section 2166.1(f) in Attachment A.)

- 8) Manufacturers commented that the ARB had previously agreed to a shorter warranty for the battery pack of a HEV, in order to reflect uncertainty in the lifetime of this component. As a result, any corrective action involving an extended warranty for battery packs should not exceed its warranty period. After reviewing HEV-certified vehicle warranty requirements, staff agrees and regulatory language has been added that limits the extended warranty time and mileage period for propulsion battery packs to 10 years or 150,000 miles (whichever first occurs) (See proposed Section 2166(j) in Attachment A.)
- 9) Manufacturers commented that the proposed test procedures required the manufacturer to state that the emission control devices installed on their vehicles would not exceed a failure rate of greater than four percent or 50 vehicles (whichever is greater) within their useful life. The correct statement should state “...would not exceed a failure rate greater than four percent or 50 vehicles (whichever is greater) within the warranty period.” Staff agrees and has made changes to the applicable test procedures. (See proposed Test Procedures in Appendix B.)
- 10) Manufacturers commented that the proposal should tie corrective action for emission component defects to only exceedances of the applicable emission standards and not a violation of test procedures. The staff disagrees with the manufacturers’ position. Health and Safety Code Sections 43105 and 43106 give the ARB authority to invoke corrective action for violations of test procedures as well as emission standards and therefore the staff proposal is appropriate. However, regulatory language has been added that would allow manufacturers to submit information as part of the SEWIR to demonstrate for the review and approval of the Executive Officer that under no conceivable circumstance may a specific emission control component defect result in an increase in emissions over that of a properly operating vehicle or engine without the defect. For example, if a manufacturer discovered that catalysts were being replaced due to a cracked or broken heat shield, this failure could be argued that the defect would not cause any conceivable emissions impact. In proven cases, the Executive Officer may elect to withdraw any corrective action requirement. (See proposed Section 2168(f)(6) in Attachment A; This relates to Main Point 1, discussed above.)
- 11) Staff identified three non-substantive regulatory language changes that needed clarification.
  - a. Staff inadvertently included the 2010 and subsequent model year off-road motorcycle categories in the proposal. The staff acknowledges that off-road

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motorcycles should not be included as part of this proposal. The proposed regulations have been revised to eliminate the off-road motorcycle categories. [See proposed Section 2166(a)(1)]

- b. The ARB's in-use vehicle enforcement test procedures were inadvertently removed in the 2010 and subsequent model years. Staff has added language to re-establish the in-use vehicle enforcement test procedures for these model years. (See revised Section 2136)
- c. Staff determined that manufacturers of partial zero emission vehicles shall be limited to filing EWIRs for exhaust after-treatment devices, computer related repairs including calibration updates, battery cells used for vehicle propulsion, and any emission-control device not subject to the 15 year/150,000 mile emission control warranty provisions for such vehicles. Regulatory language has been added to reflect this change. (See proposed Section 2167(a)(4) in Attachment A.)

## **B. Other Proposed Changes**

Since the December 7, 2006 hearing, the staff determined that several additional changes were appropriate based on the testimony and comments submitted by industry. The following is a summary of these proposed changes.

- 1) The Board discussion at the hearing suggested that the extended warranty period should not exceed the certified useful life period. As a result, the staff has added regulatory language that limits the extended warranty period to equal the applicable certified useful life period for all vehicle and engine categories. (See proposed Section 2166.1(j) in Attachment A; this relates to Main Point 5, discussed above.)
- 2) The Motorcycle Industry Council testified that, since there are no adopted or implemented requirements for OBD, this proposal would lead to recall for all failing components and that some consideration should be given to the fact that motorcycles are already warranted for their entire useful life period. Staff agrees that all component failures would be subject to recall since they are not monitored by OBD, but also acknowledges that unlike other manufacturers, motorcycles do already have warranties for the full useful life of their emission components. However, since OBD is not available to detect component failures and exhaust after treatment devices are so crucial to limiting emissions staff feels they should remain primarily subject to recall. Since motorcycles are a smaller emission source relative to the light-duty and heavy-duty industries and do carry useful life warranties, staff does propose allowing non exhaust aftertreatment components be addressed through their useful life warranties. Staff has added language to incorporate this

change. (See proposed Section 2171(c) in Attachment A; This relates to Main Point 6 discussed above.)

- 3) Industry commented that the October 20, 2006 proposal provided for a public hearing to contest recalls, but not other corrective actions. The staff has added language to the proposed regulations that would allow a manufacturer to challenge any corrective action including extended warranties through the public hearing process. (See proposed Section 2174(a) in Attachment A; This relates to Main Point 4.)

A flow diagram that depicts the current proposal is shown in Attachment D. It is only meant to be a pictorial guide and not part of the regulatory package.

Industry also expressed concerns regarding the staff proposal because they believe it creates a prescriptive standard. The October 20, 2006 proposed amendments, including the amendments discussed above, would set a performance standard, the four percent failure rate, establishing an “objective with the criteria stated for achieving the objective.” Government Code section 11342.570. The means of compliance with the performance standard is left to the manufacturers. The proposed amendments do not establish a prescriptive standard. They do not specify “the sole means of compliance with a performance standard by specific actions, measurements, or other quantifiable means.” Government Code section 11342.590. The proposed amendments are not prescriptive standards because they would not mandate the use of specific technologies or equipment. See Government Code section 11346.2(b)(1) and (3)(A).

Much testimony at the hearing was critical of the staff’s proposal to allow an extended warranty in lieu of recall as corrective action. One board member asked whether in light of criticism, we should return to recall as the only corrective action. Although staff is not proposing such a change at this time, staff is requesting comments from interested stakeholders.

### **III. Analysis of Regulatory Alternatives**

The original ISOR dated October 20, 2006 contains an analysis of regulatory alternatives that the staff believes is adequate and in keeping with ARB practice. Nevertheless, the Alliance of Automobile Manufacturers has contended that this original analysis is deficient, main point 9. Without conceding that this contention is correct, the staff supplements the original analysis of regulatory alternatives as set forth below. This supplemental analysis, and the submittals in Attachments E, F and G, are being made available to the public more than 45 days before the March 22-23, 2007 hearing at which the Board will further consider the proposed regulatory amendments. The public

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will have the opportunity to comment on these materials at that hearing and in a supplemental 15-day comment period after the hearing.

The regulatory alternatives to the staff's proposal (including those advanced by the Alliance and the alternative the staff presented at the May 2, 2006 workshop) are based on using emissions testing to show the emissions impact of a failing emissions-related component. The staff believes that basing the availability of recall or other corrective action on the emissions impact of a systemic failure of emissions-related components is undesirable and unnecessarily frustrates the implementation of proper remedies. Emissions testing needed to demonstrate emissions impacts of failures of emissions-related components is expensive, time-consuming, seldom dispositive and is fraught with issues regarding the validity of any particular test plan. Taking these circumstances into account, the staff believes that it is desirable to base the availability of recall or other corrective action on a clearer standard that does not have the disadvantages that plague standards based on emissions impacts and emissions testing.

Accordingly, the staff developed the proposed standard which is based on the simple showing that an emissions-related component failed in use at a particular percentage rate, as evidenced in the emissions warranty reports that vehicle manufacturers file with the ARB. In addition to avoiding the pitfalls of standards based on emissions impacts and emissions testing, the staff believes that the approach it proposes has several other advantages. These advantages include: allowing the implementation of swifter recalls or other corrective actions at lower transaction costs, harnessing the powers of on-board diagnostic systems to detect emission component failures and warn drivers to seek repairs, relating the recall/corrective action decision to the durability demonstration that manufacturers must make to obtain ARB's certification, and guaranteeing that the vehicles that manufacturers use for certification testing are substantially the same in construction in all material respects to the vehicles that they sell to the public (Main Points - Section I. 5). Staff believes that emission-control components are installed by the manufacturers to control emissions. Those components are required to be durable for the certified useful life; and, if they fail at systemic rates early in customer use, they violate certification test procedures and will lead to increased emission levels. Those defects should be addressed quickly and the current proposal serves these purposes more effectively than the alternatives, which are based on emissions impact and emissions testing.

The rest of the ISOR contains a much more detailed description of the reasons why the staff believes that the alternative it is proposing is superior to alternatives based on emissions impacts and emissions testing, particularly alternatives based on the status quo, which the Alliance of Automobile Manufacturers also advocates. The rest of the ISOR is incorporated here. Staff does provide further detailed analysis on each of the industry alternatives below.



A. Alliance of Automobile Manufacturers – Alternative dated May 31, 2006

The Alliance of Automobile Manufacturers (Alliance) submitted an alternative proposal (see Attachment E) to the warranty reporting procedures on May 31, 2006, in response to the ARB's initial workshop notice, and presented the item at ARB's El Monte office on June 8, 2006. The alternative was very similar to the ARB's initial proposal discussed at the May 2006 workshop, however the proposal involved a calculation of a "projected emission factor" that took into account the vehicle's emissions with the defect and how long the vehicle would be driven with the defect installed (an assumption would have to be made on how long the average owner would drive with the failed component before repair). Recall would be based on the calculation of the projected emission factor and would only be required if the problem was not overt. If the calculation showed corrective action was necessary and the problem was overt, an extended warranty would only be authorized if the problem reached an unscreened repair level of greater than 20 percent.

The staff carefully analyzed the Alliance's alternative and discovered that a vehicle would have to fail the standard(s) by an extreme amount and be driven in this condition for thousands of miles before corrective action would be considered. For example, an oxygen sensor failure could fail the emission standards by a factor of two and be driven for 7,000 miles in this "unrepaired" condition. According to the Alliance's calculations, this vehicle would never be recalled because the emissions over the useful life would not exceed the emission standards. If the same vehicle with the oxygen sensor problem failed the emission standards by a factor of eight and was driven for 10,000 miles before repair, the vehicle would fail the emission standards but only by about five percent. The manufacturer could argue that five percent is a marginal failure and would not require corrective action because ARB has allowed such marginal failures to forego corrective action during in-use compliance testing. Based on the staff's analysis of this alternative and the discussion above, the ARB staff did not consider the Alliance's alternative in this case to be a viable program. The Alliance was verbally notified of the staff's position on August 9, 2006. The Alliance again asked staff to consider their May proposal and staff responded again in a November 3, 2006 meeting, that the proposal was not reasonable and was similar to the status quo but more complicated.

B. Alliance of Automobile Manufacturers – Alternatives dated November 20, 2006 and January 16, 2007

The Alliance submitted a second alternative proposal (see Attachment F) to the warranty reporting procedures on November 20, 2006, within the 45-day comment period of the ISOR rulemaking proposal dated October 20, 2006. The Alliance's proposal closely followed the staff's proposal but incorporated an emissions test

sequence for determining the emissions impact of systemic emission component failures. The Alliance's plan would only result in corrective action if the defective component causes emissions to exceed the standard(s). This alternative was not considered because emission component durability will no longer be tied to emissions testing for establishing an exceedance of the emission standard(s) which is again similar to the current warranty reporting program, or status quo.

On January 16, 2007, the Alliance again submitted a very similar proposal as to the November 20, 2006 submission, but included a generic test plan for evaluating systemic emission component defects (See Attachment G). The test sequence requires a minimum of five emission tests of typical failures that could take as long as seven months to complete. Staff anticipates disagreements between staff and industry regarding the representation of typical emission component failures and what would be considered to be a proper test vehicle(s). Staff believes that these test program variables will lead to additional emissions testing to be performed by ARB to prove that corrective action is necessary for a given emission component defect case. In addition to these shortcomings, the staff is well aware of discrepancies and inaccuracies of emission test results due to laboratory quality control issues and other influenced deviations from the emission testing procedures through other in use test programs. Although the staff is not supportive of the emissions test plan and is not being considered in this proposal, some of the issues listed by the Alliance on the January 16, 2007 proposal are addressed by the changes presented in this notice.

#### C. Motorcycle Industry Council – Alternative dated May 31, 2006

The Motorcycle Industry Council (MIC) presented an alternative to the warranty reporting regulations (see Attachment H) dated May 31, 2006, that also involved emissions testing, and worked with ARB staff over the following month to clarify specific issues. Based on discussions at that time, the ARB staff was considering options that involved emissions testing but has changed strategies for correcting systemic emission component defects since that time. The MIC's comments dated December 4, 2006, reiterates the industry's belief that the proposal is too strict because it imposes corrective action on emission component failures regardless of whether the defect causes the vehicle to exceed the applicable emissions standards. As already stated, the staff believes that provisions exist in the H & S Code that authorizes corrective action for emission components that lack the durability required by certification.

Staff acknowledges that since the motorcycle industry already warrants their vehicles to the certified useful life, corrective action will be limited to systemic exhaust after-treatment defects. However, the industry will still be required to monitor and report warranty activity for all emission-related components. This will allow staff to identify suspect engine families that would be subject to potential ARB in-use compliance testing.

#### D. Heavy-Duty Industry Concerns

The Engine Manufacturers Association (EMA) that represents the heavy-duty engine and vehicle manufacturers testified that the proposal lacked specific definitions for terms used in the proposed regulations. The current proposal has been revised to address these concerns as noted in section II. A(5) and A(7) of this document. Additionally, EMA stated that both OBD and NOx after-treatment technology will be implemented on heavy-duty applications beginning with the 2010 model year and will not be fully implemented until the 2013 model year. EMA requested special consideration for corrective action during this time period. Staff acknowledges this concern but since exhaust after-treatment is the primary emission control device, the staff proposal cannot accommodate this request. Finally, a concern was raised regarding the proposed extended warranty periods exceeding the certified useful life. As stated earlier, all extended warranties will be equal to the applicable certified useful life period. (Main Point 7, discussed above.)

#### E. Automotive Aftermarket Industry Association – Comments dated December 1, 2006

The Automotive Aftermarket Industry Association (AAIA) and its affiliates have met with ARB staff on several occasions to discuss the proposed amendments to the emission warranty reporting regulations. The AAIA has made it very clear that they do not agree with the extended warranty provisions of the proposed amendments but are willing to support the corrective action requirements of the proposal provided the independent repair industry could be utilized as warranty repair stations. The AAIA submitted this position officially based on their comments dated December 1, 2006. The AAIA claims that ARB's proposal will have a negative economic impact on small businesses that compose the independent aftermarket parts and service industry. The ARB staff has informed AAIA that the extended warranty corrective actions would only be imposed on the component that is shown to be defective. The 2005 RAND Corporation study projects that the independent vehicle repair industry will earn a revenue of \$15.4 billion for the 2010 calendar year. As a point of comparison, staff estimated the actual corrective action costs for 2002 model year vehicles at approximately \$41 million assuming repairs were all performed in one year at dealership facilities. Staff believes that the corrective action costs for 2010 model year vehicles and engines, under the proposed regulations, will closely follow the 2002 model year costs. Based on this estimate, independent repair facilities would lose 0.3% of their revenue based on this proposal. The RAND Corporation study shows that the vehicle repair industry is a multi-billion dollar business and the significant economic impacts claimed in the testimony presented at the December 7, 2006, Board Hearing are not supportable.

AAIA and its members also argued that owners who return to the dealer for extended warranty repairs will receive add-on services at that time of repair (e.g., owners will opt for an oil change or brake repair at the time the extended warranty repair is being performed). This statement is speculative and add-on type repairs being performed by the dealer are clearly the choice of an owner that may or may not occur. The AAIA has suggested that ARB require manufacturers to allow independent repair facilities to perform warranty repairs. ARB has no authority to implement AAIA's suggestion. However, the ARB staff has changed Section 2166(i) to redefine extended warranty corrective action as the time and mileage period equivalent to the vehicle's useful life. This change will reduce the time and mileage period of an extended warranty for the majority of the affected vehicles covered by this proposal and help assure that any adverse economic impact to the independent repair industry in California is reduced. (Main Point 8, discussed above.)

#### **IV. Cost Analysis**

In order to calculate the cost of the staff proposal, the cost of the current program is compared to the cost had the proposed regulations been in effect. The corrective actions involve extended warranties, and recalls. The cost of each is evaluated separately. Staff has used model year 2002 as the base year for comparison because reporting for that year is nearly complete and most corrective actions have been decided. In 2002, corrective actions involved 11 extended warranties (300,000 vehicles) and 15 recalls (130,000 vehicles). The 430,000 vehicles involved is typical for recent years.

The cost of the corrective actions involving extended warranties is estimated at \$32 million. Included in the cost estimate are labor and parts cost for repairing the vehicles. These are based on labor estimates using the Mitchell's repair manual, and a dealership survey indicating a typical labor rate of \$90 per hour. Staff assumed 30 percent of the affected vehicles would receive warranty repairs outside the normal warranty period (within the warranty period the rate is typically 15 to 30 percent).

The cost of the corrective actions involving recall was calculated in a similar manner, except the 93 percent of the affected vehicles were assumed to be repaired. The cost of the recalls is estimated at \$9 million, for a total cost of the current warranty reporting program for the 2002 model year of \$41 million. Of the \$41 million, \$7 million is contributed to the heavy duty industry. The motorcycle industry has received no emission induced corrective actions to date for that model year.

Had the proposed revisions to the warranty reporting program been in effect for the 2002 model year, 700,000 vehicles would have been identified as having systemic defects, a 63 percent increase compared to the current program. All affected models would have had extended warranties as the corrective action; none would have clearly

met the requirement for recall. Using the same assumptions discussed above, the cost of the program for 2002 would have been \$66 million, a 61 percent increase. Under the proposed program, heavy-duty costs would increase to \$24 million due to additional corrective actions. Again, no increased cost to the motorcycle industry is expected to occur since they have had no emission induced corrective actions over the last few years and they already carry useful life warranties for their emission parts.

In 2010, when the proposed revisions are scheduled to go into affect, the cost of the warranty program will be less because about 43 percent of the light-duty vehicles will be PZEVs, which already carry a 150,000 mile warranty. For these models the warranty reporting period will cause no additional cost, other than redesign of the defective part. In addition, it is reasonable to assume that defect rates will reduce by at least ten percent with PZEV durability technology being passed onto to non-PZEV vehicles. Staff also accounted for an additional five percent reduction for emission-related defects reported over the ten percent EWIR rate and will be determined to be less than a true four percent failure through the SEWIR process. However, the above adjustments were not made to the heavy duty or motorcycle industries since those industries are expected to either remain constant or experience an increase in corrective actions due to the introduction of new after treatment technologies. Taking the above factors into account, the estimated costs of the proposed revised warranty reporting program is \$42.8 million, close to the actual current program cost for 2002 model year.

A systemic defect in an after-treatment component, such as a catalyst, requires a recall under the staff proposed revisions. No recalls occurred in 2002, so staff has evaluated the impact on program cost had a catalyst recall, such as the Chrysler case involving 1996 to 1999 model light trucks, discussed in the staff report. In that case Chrysler recalled 41,000 vehicles at an estimated cost of \$21 million. Had the proposed revised program been in effect, staff believes that 72,000 vehicles would have been recalled at an estimated cost of \$38 million. Although this type of failure and recall is relatively rare, staff's assessment provides an estimate of how the annual cost of the program could vary.

Two other areas to consider are the costs of reporting and compliance, neither are factored into the analysis. The reporting burden and its associated costs will decrease since the frequency is changing from quarterly to annually, and the trigger level is increasing from one to four percent claim rates. It is hard to quantify reporting cost but is expected to be a very small savings. In the area of compliance cost, most manufacturers will experience either no or negligible additional compliance costs to build more durable parts, because based on our analysis of past warranty claims most manufacturers have not hit the four percent threshold. For the other manufacturers who may be affected we believe that their compliance costs attributable to the proposed amendments will be negligible due to the fact that the PZEV requirements will influence

manufacturers to build more durable parts to last for the duration of the PZEV warranty (15 years/150,000 miles), that these parts will be used in the rest of the on-road fleet and that any extra expense will be small and can be passed on to consumers. In addition, the staff believes that the cost of improving a part is relatively small compared to the total cost of the parts and labor levied for a corrective action.

A manufacturer provided confidential cost estimates to the Board on December 7, 2006. Staff evaluated the cost analysis and disagrees with the manufacturer's findings. Much of the data is based on early 1990 era failures and does not account for improvements in emission parts and the development of OBD II. With PZEV technology coming on line the manufacturer did not consider that improved emission component technology may be carried over into future non-PZEV vehicles, thus reducing warranty rates and the need for additional corrective actions. Staff believes that the approach discussed above accurately reflects the potential costs that may be associated with the proposal.

### **Workshop Information**

Staff anticipates returning to the Board on March 22, 2007, for its consideration of the revised proposal and solicits public input on the attached regulatory and test procedure language.

ARB staff has scheduled a workshop to discuss its current proposal and to obtain information to further formulate specific language and finalize the regulatory language prior to the March 22, 2007, Board Hearing. The workshop will be held at the date, time, and location below:

Date: Wednesday, February 14, 2007  
 Time: 1:30 pm – 5:00 pm  
 Location: Air Resources Board  
 Annex IV Auditorium  
 9530 Telstar Avenue  
 El Monte, California 91731

If you would like to make a formal presentation during the workshop, please contact Mr. Harold Mace, Manager, Field Inspection and Testing Section, at (626) 575-6741 or email at [hmace@arb.ca.gov](mailto:hmace@arb.ca.gov).

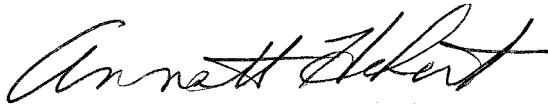
Interested parties unable to participate in the workshop or those wishing to supply additional information are encouraged to submit written comments by April 25, 2006. Written comments should be sent to Ms. Annette Hebert, Chief, Mobile Source Operations Division, Air Resources Board, 9480 Telstar Avenue, Suite 4, El Monte, California 91731.

A proposed summary of the amended warranty reporting regulations is available on the following ARB website: <http://www.arb.ca.gov/regact/recall06/rappena.pdf>.

If any party wishes the information it submits to be treated as confidential by ARB staff, it should be clearly marked as "confidential" and should be on pages that are easily detachable from other, non-confidential information. California guidelines (Sections 91000-91002, Title 17, CCR, and Health and Safety Code Section 39660(e)) will be followed in the handling of confidential information.

To request special accommodations for persons with disabilities, please contact Mr. Harold Mace no later than February 2, 2007. TTY/TDD/Speech-to-Speech users may dial 711 for the California Relay Service.

Sincerely,

A handwritten signature in black ink, appearing to read "Annette Hebert". The signature is written in a cursive, flowing style.

Annette Hebert, Chief  
Mobile Source Operations Division

Attachments

Attachment A

Proposed Regulation Changes



## PROPOSED REGULATION ORDER

Set forth below are the proposed amendments to title 13, of the California Code of Regulations. Proposed amendments are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions.

### **§ 1956.8. Exhaust Emission Standards and Test Procedures - 1985 and Subsequent Model Heavy Diesel-Engine and Vehicles.**

*Introduction.* [No change.]

Section (a). [No change.]

(b) *Test Procedures.* The test procedures for determining compliance with standards applicable to 1985 and subsequent model heavy-duty diesel engines and vehicles and the requirements for participation in the averaging, banking and trading programs, are set forth in the "California Exhaust Emission Standards and Test Procedures for 1985 through 2003 Model Heavy-Duty Diesel Engines and Vehicles," adopted April 8, 1985, as last amended December 12, 2002, the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles," adopted December 12, 2002, and the "California Interim Certification Procedures for 2004 and Subsequent Model Hybrid-Electric Vehicles, in the Urban Bus and Heavy-Duty Vehicle Classes," adopted ~~October 24, 2002~~, [insert date of amendment for this rulemaking] which are incorporated by reference herein.

Section (c). [No change.]

(d) *Test Procedures.* The test procedures for determining compliance with standards applicable to 1987 and subsequent model heavy-duty Otto-cycle engines and vehicles are set forth in the "California Exhaust Emission Standards and Test Procedures for 1987 through 2003 Model Heavy-Duty Otto-Cycle Engines and Vehicles," adopted April 25, 1986, as last amended December 27, 2000, the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines," adopted December 27, 2000, as last amended December 12, 2002, the "California Non-Methane Organic Gas Test Procedures," adopted July 12, 1991, as last amended July 30, 2002, and the "California Interim Certification Procedures for 2004 and Subsequent Model Hybrid-Electric Vehicles, in the Urban Bus and Heavy-Duty Vehicle Classes," adopted ~~October 24, 2002~~, [insert date of amendment for this rulemaking] which are incorporated by reference herein.

Section (e). [No change.]

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43104 and 43105, 43106 and 43806 Health and Safety Code and Section 28114, Vehicle Code. Reference: Sections 39002, 39003, 39667, 43000, 43009.5, 43013,

43018, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43204, and 43806, Health and Safety Code.

**§ 1958. Exhaust Emission Standards and Test Procedures – Motorcycles, motorcycle engines Manufactured on or After January 1, 1978**

*Introduction.* [No change.]

Sections (a) through (c)(4). [No change.]

Amend (c) by adding (5) below:

(5) Amend: 86.408-78 (b) as follows: No change, except to add the following sentences to the paragraph: Beginning with 2010 model-year vehicles or engines, at the time of certification manufacturers shall state, based on good engineering judgment and information available at that time, that the emission control devices on their vehicles or engines are designed and will be manufactured to operate properly for the full useful life of the vehicles or engines. If any emission control device fails at a valid failure rate of at least 4% or 50 vehicles, whichever is greater, in an engine family or test group over the applicable warranty period of the vehicles or engines they are installed in, it constitutes a violation of these test procedures and it entitles the Executive Officer of the Air Resources Board to require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174. Vehicles and engines tested for certification shall be, in all material respects, substantially the same as production vehicles and engines. If production vehicles have warranty claims rates in use that exceed four percent or fifty (whichever is greater) it is conclusive proof that vehicles and engines tested for certification are not, in all material respects, substantially the same as production vehicles and engines. If any emission control device fails at this rate, that constitutes a violation of these test procedures and it entitles the Executive Officer of the Air Resources Board to require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174.

Note: Authority cited: Sections 39500, 39600, 39601, 43013, 43018, 43101, 43104, 43105, and 43106 Health and Safety Code. Reference: Sections 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43204, and 43205, Health and Safety Code.

Set forth below are the proposed amendments to title 13 of the California Code of Regulations. Proposed amendments are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions. Amendments to § 1961 that were adopted by the Board on June 22, 2006 as part of a rulemaking for evaporative emissions, but which have not yet been approved by the Office of Administrative Law are indicated in double underline to indicate additions and ~~double strikeout~~ to indicate deletions.

**§ 1961. Exhaust Emission Standards and Test Procedures - 2004 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.**

*Introduction.* [No change.]

Sections (a) through (c). [No change.]

(d) *Test Procedures.* The certification requirements and test procedures for determining compliance with the emission standards in this section are set forth in the “California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” as amended ~~August 4, 2005~~ [insert date of amendment for the June 22, 2006 evaporative emissions rulemaking] [insert date of amendment for this rulemaking], and the “California Non-Methane Organic Gas Test Procedures,” as amended July 30, 2002, which are incorporated herein by reference. In the case of hybrid electric vehicles and on-board fuel-fired heaters, the certification requirements and test procedures for determining compliance with the emission standards in this section are set forth in the “California Exhaust Emission Standards and Test Procedures for 2005 and Subsequent Model Zero-Emission Vehicles, and 2001 and Subsequent Model Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes,” incorporated by reference in section 1962.

Section (e). [No change.]

Note: Authority cited: Sections 39500, 39600, 39601, 43013, 43018, 43101, 43104, 43105 and 43106 , Health and Safety Code. Reference: Sections 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43204, and 43205, Health and Safety Code.

Set forth below are the proposed amendments to title 13, of the California Code of Regulations. Proposed amendments are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions.

**§ 1976. Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions.**

\* \* \* \*

(c) The test procedures for determining compliance with the standards in subsection (b) above applicable to 1978 through 2000 model year vehicles are set forth in “California Evaporative Emission Standards and Test Procedures for 1978-2000 Model Motor Vehicles,” adopted by the state board on April 16, 1975, as last amended August 5, 1999, which is incorporated herein by reference. The test procedures for determining compliance with standard applicable to 2001 and subsequent model year vehicles are set forth in the “ California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles, “ adopted by the state board on August 5, 1999, and amended on \*\*\*\*\*, which is incorporated herein by reference.

\* \* \* \*

Note: Authority cited: Sections 39500, 39600, 39601, 43013, 43018, 43101, 43104, 43105 and 43106, Health and Safety Code. Reference: Sections 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43204, and 43205, Health and Safety Code.

**§ 1978. Standards and Test Procedures for Vehicle Refueling Emissions.**

\* \* \* \*

(b) The test procedures for determining compliance with standards applicable to 1998 through 2000 gasoline, alcohol, diesel, and hybrid electric passenger cars, light-duty trucks, and medium-duty vehicles are set forth in the: "California Refueling Emissions Standards and Test Procedures for 1998-2000 Model Year Motor Vehicles," as amended August 5, 2000, which is incorporated herein by reference. The test procedures for determining compliance with standards applicable to 2001 and subsequent gasoline, alcohol, diesel, and hybrid electric passenger cars, light-duty truck, and medium-duty vehicles are set forth in the "California Refueling Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles," adopted August 5, 1999, and amended \*\*\*\*\*, which is incorporated herein by reference.

\* \* \* \*

Note: Authority cited: Sections 39500, 39600, 39601, 43013, 43018, 43101, 43104, 43105 and 43106, Health and Safety Code. Reference: Sections 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43204, and 43205, Health and Safety Code.

Section 2111. Applicability.

(a) These procedures shall apply to:

(1) California-certified 1982 ~~and subsequent~~ through the 2009 model-year passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, motorcycles, and California-certified 1997 and subsequent model-year off-road motorcycles and all-terrain vehicles, including those federally certified vehicles which are sold in California pursuant to Health and Safety Code section 43102,

(2) California-certified motor vehicle engines used in such vehicles,

(3) California-certified 2000 and subsequent model-year off-road compression-ignition engines, and

(4) California-certified 2009 and subsequent model-year spark-ignition inboard and sterndrive marine engines.

(b) These procedures shall not apply to zero emission vehicles and those vehicles certified under Health and Safety Code section 44201.

(c) The Executive Officer may waive any or all of the requirements of these procedures if he or she determines that the requirement constitutes an unwarranted burden on the manufacturer without a corresponding emission reduction.

Note: Authority cited: Sections 39600, 39601, 43013, 43018 43105 and 43106, Health and Safety Code. Reference: Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

#### Section 2122. General Provisions.

The provisions regarding applicability of the ordered recall procedures and the definitions shall be the same as those set forth in Title 13, California Code of Regulations, Sections 2111 and 2112. The provisions of this Article shall apply to the vehicles and engines specified in section 2111 manufactured up to and including the 2009 model year, plus their useful lives. This Article shall apply not apply to vehicles and engines manufactured for the 2010 model year and thereafter.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

#### Section 2136. General Provisions.

The provisions regarding applicability of the enforcement test procedures and the definitions shall be the same as those set forth in Title 13, California Code of Regulations, Sections 2111 and 2112- and beginning with the 2010 model year, Sections 2166 and 2166.1. If the executive officer determines that an emissions violation exists under Health and Safety Code 43105, he/she may order a recall or corrective action to correct the affected vehicles.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

#### Section 2141. General Provisions.

(a) The provisions regarding applicability of the failure reporting procedures and the definitions shall be the same as those set forth in Title 13, California Code of Regulations, Sections 2111 and 2112, except that this Section 2141 does not apply to off-road compression-ignition engines, as defined in Section 2421. The provisions of this Article shall apply to the vehicles and engines specified in section 2111

manufactured up to and including the 2009 model year, plus their useful lives. This Article shall apply not apply to vehicles and engines manufactured for the 2010 model year and thereafter.

(b) The requirement to file emission warranty information reports and field information reports for a given class or category of vehicles or engines shall be applicable for the warranty period but not to exceed the useful-life period of the vehicles or engines beginning with the 1990 model-year vehicles or engines.

(c) The requirement to file an emissions information report for a given class or category of vehicles or engines shall be applicable for the useful-life period of the vehicles or engines.

(d) In the case of motor vehicles or engines for which certification of the exhaust and evaporative emission control systems is granted to different manufacturers, the information reporting responsibility in subsections (b) and (c) above shall be assigned to the certifying manufacturer.

Note: Authority cited: Sections 39600, 39601, 43105 and 43106, Health and Safety Code. Reference: Sections 43000, 43009.5, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

Adopt New Regulations To Read:

## **Article 5. Procedures for Reporting Failures of Emission-Related Equipment and Required Corrective Action**

Section 2166. General Provisions.

(a) The provisions of this article apply to:

(1) California-certified 2010 and subsequent model-year passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and motorcycles.

(2) California-certified engines used in such vehicles.

(b) For the purposes of this article, the definitions shall be the same as those set forth in Title 13, California Code of Regulations, Section 2035 (c) and Section 2166.1.

(c) This procedures shall not apply to zero emission vehicles and those vehicles certified under Health and Safety Code 44201.

(d) The Executive Officer may waive any or all of the requirements of this Article if he or she determines that the requirement constitutes an unwarranted burden on the manufacturer.

(e) This article contains procedures for reporting emissions warranty information and procedures for determining, and the facts constituting, compliance or failure of compliance with and violations of test procedures based on emissions warranty information. This article also contains procedures for requiring recalls or other corrective action based on such information. Nothing in this article shall limit the Executive Officer's authority pursuant to Health and Safety Code section 43105 to require recalls or other corrective action in other types of situations.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

Section 2166.1. Definitions.

For purposes of this article, the following definitions apply.



(a) "Capture rate" means the percentage of in-use vehicles subject to recall which must be corrected to bring the class or category of vehicles into compliance. The number of vehicles subject to recall shall be based on the actual number of vehicles in use as verified by the Department of Motor Vehicles registration records, or vehicle or engine registration records compiled and prepared by R. L. Polk and Company or a comparable source at the time a recall is initiated.

(b) "Corrective Action" refers to any action taken by the manufacturer to remedy a violation of emission standards or test procedures. Corrective action may include recall, extended warranty, or other action ordered by the Executive Officer. The Executive Officer may order direct notification of corrective action to vehicle or engine owners.

(c) "Correlation factor" means a pollutant-specific multiplicative factor calculated by a manufacturer for an engine family or test group which establishes a relationship between chassis exhaust emission data, as determined from the test procedures specified in section 1960.1 or 1961, Title 13, California Code of Regulations, and engine exhaust emission data, as determined from the test procedures specified in section 1956.8, Title 13, California Code of Regulations.

(d) "Days", when computing any period of time, means normal working days on which a manufacturer is open for business, unless otherwise noted.

(e) "Defective emission-control component" or "defective emission-related component" means any component that is installed on a California-certified vehicle or engine that is considered to be a "warranted part" pursuant to Section 2035 that is not replaced or repaired solely for customer relations reasons or misdiagnosis and does not have a mechanical defect, will not fail to operate properly within the manufacturer's specifications during its certified useful life and will not increase emissions under any conceivable circumstance if it is not replaced.

(f) "Emission-control component" or "emission-related component" means a device, system or assembly described in the manufacturer's approved application for certification which is considered to be a "warranted part" pursuant to Section 2035 and subject to this Article.

(g) "Emission Warranty Claim" means an adjustment, inspection, repair or replacement of a specific emission-related component for which the vehicle or engine manufacturer is invoiced or solicited by a repairing agent for compensation pursuant to warranty provisions, regardless of whether compensation is actually provided.

(h) "Executive Officer" means the Executive Officer of the Air Resources Board or his or her authorized representative.

(i) "Exhaust after-treatment device" means any device or system designed to oxidize, reduce or trap post-combustion exhaust emissions, including those components that transport the exhaust emissions from the engine to the after-treatment device,

described in the manufacturer's application for certification, and installed on a vehicle or engine certified for sale in California.

(j) "Extended Warranty" means corrective action required by the Executive Officer that extends the warranty time and mileage periods for a specific emissions-related component pursuant to this article. For passenger cars, light-duty trucks, medium-duty vehicles and engines, and heavy-duty vehicles and engines used in such vehicles, the extended warranty shall be equal to the applicable certified useful life period of that vehicle or engine. The Executive Officer may order direct notification of corrective action to vehicle or engine owners. The extended warranty on hybrid electric vehicle battery packs used for vehicle propulsion shall be limited to 10 years or 150,000 miles (whichever first occurs).

(k) "Influenced Emission Recall" means an inspection, repair, adjustment, or modification program initiated and conducted by a manufacturer or its agent or representative as a result of any evidence of noncompliance to remedy any nonconformity for which direct notification of vehicle or engine owners is necessary.

(l) "Nonconformity" or "noncompliance" exists whenever an engine family, test group or subgroup of vehicles are determined to be in violation of test procedures pursuant to this article.

(m) "Ordered Recall" or "recall" means an inspection, repair, adjustment, or modification program required by the Board and conducted by the manufacturer or its agent or representative to remedy any nonconformity for which direct notification of vehicle or engine owners may be required.

(n) "Quarterly reports" refer to the following calendar periods: January 1- March 31, April 1-June 30, July 1-September 30, October 1-December 31.

(o) "Systemic Failure" means any emission-control component as defined in this article or warranted part as defined in Section 2035 (c ) (2) (b), found to have valid failures meeting or exceeding four percent or 50 vehicles or engines (whichever is greater) within a specific engine family or test group, pursuant to this article.

(p) "Ultimate purchaser" has the same meaning as defined in section 39055.5 of the Health and Safety Code.

(q) "Useful life" means, for the purposes of this article:

(1) For Class I motorcycles and motorcycle engines (50 to 169 cc or 3.1 to 10.4 cu. in.), a period of use of five years or 12,000 kilometers (7,456 miles), whichever first occurs.

(2) For Class II motorcycles and motorcycle engines (170 to 279 cc or 10.4 to 17.1 cu. in.), a period of use of five years or 18,000 kilometers (11,185 miles), whichever first occurs.

(3) For Class III motorcycles and motorcycle engines (280 cc and larger or 17.1 cu. in. and larger), a period of use of five years or 30,000 kilometers (18,641 miles), whichever

first occurs.

(4) For light-duty and medium-duty vehicles certified under the Optional 100,000 Mile Certification Procedure, and motor vehicle engines used in such vehicles, a period of use of ten years or 100,000 miles, whichever first occurs.

(5) For 2001 and subsequent-model year medium-duty low-emission, ultra-low-emission and super-ultra-low-emission vehicles certified to the primary standards in section 1961(a)(1), and motor vehicle engines used in such vehicles, a period of use of ten years or 120,000 miles, whichever occurs first. For 2001 and subsequent medium-duty low-emission, ultra-low-emission and super-ultra-low-emission vehicles certified to the optional 150,000 mile standards in section 1961(a)(1), and motor vehicle engines used in such vehicles, a period of use of fifteen years or 150,000 miles, whichever occurs first. For all other 1995 and subsequent model-year medium-duty vehicles and motor vehicle engines used in such vehicles, and 1992 through 1994 model-year medium-duty low-emission and ultra-low-emission vehicles certified to the standards in Section 1960.1(h)(2), and motor vehicle engines used in such vehicles, a period of use of eleven years or 120,000 miles, whichever occurs first.

(6) For all other light-duty and medium-duty vehicles, and motor vehicle engines used in such vehicles, a period of use of five years or 50,000 miles, whichever first occurs. For those passenger cars, light-duty trucks and medium-duty vehicles certified pursuant to section 1960.1.5, Title 13, California Code of Regulations, the useful life shall be seven years, or 75,000 miles, whichever first occurs; however, the manufacturer's reporting and recall responsibility beyond 5 years or 50,000 miles shall be limited, as provided in section 1960.1.5. For those passenger cars and light-duty trucks certified pursuant to Title 13, California Code of Regulations, section 1960.1 (f) and section 1960.1(g), the useful life shall be ten years or 100,000 miles, whichever first occurs; however, for those vehicles certified under section 1960.1(f), the manufacturer's warranty failure and defects reporting and corrective action responsibility shall be subject to the conditions and standards specified in section 1960.1 (f).

(7) For 1997 and subsequent model year off-road motorcycles, all-terrain vehicles, and engines used in such vehicles, a period of use of five years or 10,000 kilometers (6,250 miles), whichever first occurs.

(8) For those passenger cars and light-duty trucks certified to the primary standards in section 1961(a)(1), the useful life shall be ten years or 120,000 miles, whichever occurs first. For 2001 and subsequent passenger car and light-duty truck low-emission, ultra-low-emission and super-ultra-low-emission vehicles certified to the optional 150,000 mile standards in section 1961(a)(1), and motor vehicle engines used in such vehicles, a period of use of fifteen years or 150,000 miles, whichever occurs first.

(9) For 2004 and subsequent model-year light heavy-duty diesel engines, for carbon monoxide, particulate, and oxides of nitrogen plus non-methane hydrocarbons emissions standards, a period of use of 10 years or 110,000 miles, whichever first occurs, or any alternative useful life period approved by the Executive Officer.

(10) For 2004 and subsequent model-year medium heavy-duty diesel engines, for carbon monoxide, particulate, and oxides of nitrogen plus non-methane hydrocarbons emissions standards, a period of use of ten years or 185,000 miles, whichever first occurs; or any alternative useful life period approved by the Executive Officer.

(11) For 2004 and subsequent model-year heavy heavy-duty diesel engines, 2004 and subsequent model-year heavy-duty diesel urban buses, 2004 and subsequent model-year heavy-duty diesel engines to be used in urban buses, and 2004 and subsequent model year hybrid-electric urban buses for carbon monoxide, particulate, and oxides of nitrogen plus non-methane hydrocarbon emissions standards, a period of use of 10 years or 435,000 miles, or 22,000 hours, whichever first occurs, or any alternative useful life period approved by the Executive Officer, except as provided in paragraphs (11)(i) and (11)(ii).

(i) The useful life limit of 22,000 hours in paragraph (11) of this definition is effective as a limit to the useful life only when an accurate hours meter is provided by the manufacturer with the engine and only when such hours meter can reasonably be expected to operate properly over the useful life of the engine.

(ii) For an individual engine, if the useful life hours limit of 22,000 hours is reached before the engine reaches 10 years or 100,000 miles, the useful life shall become 10 years or 100,000 miles, whichever occurs first, as required under Clean Air Act section 202(d) (42 U.S.C. 7521(d)).

(12) For 2004 and subsequent model-year heavy-duty Otto-cycle engines, for carbon monoxide, particulate, and oxides of nitrogen plus non-methane hydrocarbon emissions standards, a period of use of 10 years or 110,000 miles, whichever first occurs.

(13) For 2000 and later model year off-road compression-ignition engines, for oxides of nitrogen, hydrocarbon, oxides of nitrogen plus hydrocarbon (when applicable), carbon monoxide, particulate emission standards, and for smoke opacity:

(A) For all engines rated under 19 kilowatts, and for constant-speed engines rated under 37 kilowatts with rated speeds greater than or equal to 3,000 revolutions per minute, a period of use of five years or 3,000 hours of operation, whichever first occurs.

(B) For all other engines rated above 19 kilowatts and under 37 kilowatts, a period of use of seven years or 5,000 hours of operation, whichever first occurs.

(C) For engines rated at or above 37 kilowatts, a period of use of ten years or 8,000 hours of operation, whichever first occurs.

(14) For 2009 and subsequent model year spark-ignition inboard and sterndrive marine engines, a period of ten years or 480 hours, whichever first occurs.

(r) "Valid failure" or "valid failure rate" means an emission-control component or emission-related component that was properly diagnosed and replaced under warranty

by an authorized warranty station and represents the true and accurate failures of a specific component after legitimate screening (as specified in Section 2168) of the applicable warranty data authorized and acceptable to the Executive Officer, pursuant to this Article.

(s) "Vehicle or engine manufacturer" means the manufacturer granted certification for a motor vehicle or motor vehicle engine.

(t) "Violation of test procedures" means violation of any portion of any test procedure made applicable to motor vehicles by Division 26, Part 5 of the Health and Safety Code or by Division 3 of Title 13 of the California Code of Regulations or any test procedure violation determined pursuant to this article.

(u) "Voluntary Recall" means an inspection, repair, adjustment, or modification program voluntarily initiated and conducted by a manufacturer or its agent or representative to remedy any nonconformity for which direct notification of vehicle or engine owners may be necessary.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43104, 43105, 43106 and 43806, Health and Safety Code; and Section 28114, Vehicle Code.

Reference: Sections 39002, 39003, 39500, 43000, 43009.5, 43013, 43018, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43107, 43202, 43204-43205.5 43206, 43210, 43211, 43212, 43213 and 43806, Health and Safety Code; and Section 28114, Vehicle Code.

#### Section 2167. Emission Warranty Information Report.

(a) A manufacturer shall:

(1) Review warranty claim records for each engine family or test group on a quarterly basis to determine and compile by cumulative total the number of claims made for emission-related components. The data compiled shall be based on all warranty claims, without any prescreening of data as to the validity of the claims. In the case of heavy-duty vehicles or engines, a manufacturer may use nationwide data for monitoring warranty claims of a California-certified engine family or test group which is also certified by the United States Environmental Protection Agency.

(2) Categorize warranty claims for each engine family or test group by the specific emission control component replaced or repaired.

(3) On the basis of data obtained subsequent to the effective date of these regulations, file an emission warranty information report for each calendar year when the cumulative number of unscreened warranty claims for a specific emission-related component or repair represent at least four percent or fifty (whichever is greater) of the vehicles or engines of a California-certified engine family or test group.

(4) The filing of an emission warranty information report for a partial zero emission vehicle shall be limited to exhaust after treatment devices, computer related repairs including calibration updates, battery cells used for vehicle propulsion, and any

emission-control device not subject to the 15 year, 150,000 emission control warranty provisions for such vehicles. The Executive Officer may add emission-related components to this list as technology changes.

(b) The emission warranty information report shall be submitted in an electronic format as specified by the ARB. The file must be structured so that the test group or engine family name and the part number are the primary file keys. These two data fields are unique and cannot be duplicated within the data file. The electronic file shall include the following information:

- (1) The California-certified test group or engine family.
- (2) Part number, labor operation code or some other nomenclature that uniquely identifies a given component within a test group or engine family.
- (3) The name of the specific emission-related component being replaced or repaired.
- (4) A repair code to indicate if the emission-related component was repaired or replaced.
- (5) The warranty coverage for each reported component.
- (6) The California sales volume, the number of cumulative claims and percentage of vehicles or engines in each engine family or test group for which a warranty replacement or warranty repair of a specific emission-related component was identified.
- (7) Time frame of the EWIR being submitted.
- (8) The models of the test group or engine family for each component being repaired or replaced.
- (9) A further action status report code as dictated by ARB to indicate if corrective action or no action is required or in process.

(c) Emission warranty information reports shall be submitted not more than 25 days after the end of each calendar year unless a recall for specific components has been implemented. The Executive Officer may request that a manufacturer file quarterly emission warranty information reports for a specific emission-related component(s) for a specified period of time. Emission warranty information reports and updates shall be submitted and provided on electronic media to the Chief, Mobile Source Operations Division, 9480 Telstar Avenue, Suite 4, El Monte, CA 91731 and/or can be emailed to a designated ARB staff.

(d) The records described in this section shall be made available to the Executive Officer upon request.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013,

43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

Section 2168. Supplemental Emissions Warranty Information Report.

(a) A manufacturer shall file a Supplemental Emissions Warranty Information Report within 60 days when an emission warranty information report as specified in Section 2167 indicates that a cumulative total of unscreened warranty claims for a specific emission-related component exceeds ten percent or 100 components (whichever is greater) of the vehicles or engines of an engine family or test group. The Supplemental Emissions Warranty Information Report shall be submitted in an electronic format similar to the Emissions Warranty Information Report as required in Section 2167. The manufacturer must continue to update and report the Supplemental Emissions Warranty Information Report on a quarterly basis. A manufacturer shall submit an updated Supplemental Emissions Warranty Information Report within 60 days after each calendar quarter until the warranty reporting requirements for the given warranty item ends or corrective action is launched for the reported emission component.

(b) Additionally, a Supplemental Emissions Warranty Information Report shall be required if the manufacturer demonstrates, to the Executive Officer's satisfaction, that a systemic defect exists on a specific subgroup of vehicles and has been corrected under warranty within 18 months after the last vehicle or engine of the affected engine family or test group was manufactured. In such a case, the manufacturer would not be subject to corrective action but must establish the upper limits of the defect failure rate. However, should the emission component defect exceed this defect rate by an additional four percent or 50 vehicles (whichever is greater) the manufacturer must re-file a Supplemental Emissions Warranty Information Report pursuant to this Article or launch the appropriate corrective action.

(c) A Supplemental Emissions Warranty Information Report shall not be required if the manufacturer has committed to perform a recall to correct a defective emission control component by notifying the ARB of its intent in writing. In such a case, the manufacturer may eliminate only these components from the Emission Warranty Information Report. However, if the recall applies to a sub-group of vehicles, the non-affected vehicles are still subject to reporting requirements pursuant to this Article. Also, if the components replaced under recall fail within the warranty period exceeding four percent or 50 vehicles (whichever is greater) the manufacturer must report these defects pursuant to this Article.

(d) All Supplemental Emissions Warranty Information Reports shall be submitted to the Chief, Mobile Source Operations Division, 9480 Telstar Avenue Suite No. 4, El Monte, CA 91731 and shall contain the following information in substantially the format outlined below.

(e) Upon the manufacturer's request and with the approval of the executive officer, any reported emission component that is replaced as part of a corrective action may be waived from further reporting requirements.

(f) The Supplemental Emission Warranty Information report shall be submitted in an electronic format as specified by the ARB. The Supplemental Emissions Warranty Information Report shall be an extension of the Emission Warranty Information Report data file and shall include only those data fields from the Emissions Warranty Information Report for which the Supplemental Emission Warranty Information report is being filed. Supplemental Emissions Warranty Information Reports shall contain the following fields for each data file:

(1) The manufacturer's corporate name.

(2) Each Supplemental Emissions Warranty Information Report shall be filed individually for each defective emission-related component. Manufacturers shall designate a unique supplemental emissions warranty information report number to assist in tracking individual emission-related component problems. The nomenclature format for assigning a tracking number shall follow the sequence using the manufacturer's four digit name designation followed by the letters SEWIR, the calendar year filed and then a three digit sequential number. An example of this format would be as follows: MFRX-SEWIR-2010-001.

(3) A description of each class or category of California-certified vehicles or engines affected including make, model, model-year, engine family or test group and such other information as may be required to identify the vehicles or engines affected. The description shall include those engine families or test groups related to the affected engine family or test group through common certification test data allowed under Title 40, Code of Federal Regulations, Section 86.085-24(f), as amended December 10, 1984 or Title 40 Code of Federal Regulations, Section 86.1839-01, as adopted May 4, 1999 ( "carry-over" and "carry-across" engine families).

(4) A description of the emission-related component that failed, the failure, the probable cause of failure and the emission-related component part number. A description of all other vehicles that contain the failing component. A description of whether the failure has been detected by the On-Board Diagnostic system in the affected vehicles or engines as required by title 13 CCR sections 1968.1-1968.5.

(5) Manufacturers conducting computer recalibrations or reflashes shall explain the vehicle conditions/parameters that are being changed by the recalibration action. The manufacturer must also indicate if OBD compliance requirements are being remedied and/or affected.

(6) Any information necessary to demonstrate that the defective emissions-related component will not, under any conceivable circumstance, result in an increase in emissions over that of a properly operating vehicle or engine without the defective emissions-related component.

(7) A statement whether the cumulative total of valid warranty claims for a specific emission-related component meets or exceeds 4 percent or 50 (whichever is greater) for any engine family, test group or subgroup. On the basis of data obtained and reported pursuant to this article, a manufacturer may determine that a cumulative total



of valid warranty claims for a specific emission-related component is found to exist in less than 4 percent or 50 (whichever is greater). If this is the case, the manufacturer must supply the following information:

(i) The number and percentage of vehicles or engines in each engine family or test group for which a failure of a specific emission-related component was identified.

(ii) The total number and percentage of unscreened warranty claims and failures of a specific emission-related component projected to occur during the engine family's or test group's useful life and a description of the method used to project this number.

(iii) An estimated date when the failure of a specific emission-related component will reach 4 percent or 50 (whichever is greater).

(iv) If the failure of a specific emission-related component is found to exist in less than 4 percent or 50 (whichever is greater), provide a brief explanation why the vehicles with this specific component replacement or repair are being repaired.

(v) If the failure of a specific emission-related component is found to exist in less than 4 percent or 50 (whichever is greater), the manufacturer must re-evaluate this failure as stated in this section in the following calendar year until warranty reporting is no longer required.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

#### Section 2169. Recall and Corrective Action for Failures of Exhaust After-Treatment Devices

(a) A manufacturer shall recall an engine family, test group or subgroup of vehicles or engines to correct the systemic failure of an exhaust after-treatment device, as defined in Section 2166.1 when valid warranty claims in the engine family, test group, or subgroup meet or exceed four percent or 50 (whichever is greater) for the device.

(b) At the sole discretion of the Executive Officer, the manufacturer shall perform corrective action, including, but not limited to, providing an extended warranty as defined in Section 2166.1, for the circumstances specified in (a), either as an alternative to or in addition to the recall specified in (a).

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

Section 2170. Recall and Corrective Action for Other Emission-Related Component Failures

(a) A manufacturer shall perform corrective action, including, but not limited to, providing an extended warranty as defined in Section 2166.1, to correct the systemic failure of emission control components other than exhaust after-treatment devices, when valid warranty claims in the engine family or test group meet or exceed four percent or 50 (whichever is greater) for any emission control component.

(b) At the sole discretion of the Executive Officer, the manufacturer shall conduct a recall for the circumstances specified in (a), either as an alternative to or in addition to the corrective action specified in (a).

(c) Manufacturers that warrant their vehicles or engines for the full useful life period may not, at the sole discretion of the Executive Officer, be required to perform corrective action on systemic failures of emission-control components (with the exception of exhaust after-treatment devices), found to meet or exceed four percent or 50 (whichever is greater) within an engine family or test group, or subgroup.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

Section 2171. Recall and Corrective Action for Vehicles without On-Board Diagnostic Systems, Vehicles with Non-Compliant On-Board Diagnostic Systems, or Vehicles with On-Board Computer Malfunction

(a) If vehicles or engines not equipped with on-board diagnostic (OBD) systems, or OBD-equipped vehicles or engines that do not detect emission-control failures as required by title 13 CCR sections 1968.1-1968.5, have systemic failures of emission-control components (including exhaust after-treatment devices), found to meet or exceed four percent or 50 (whichever is greater) within an engine family or test group, or subgroup the required corrective action will be the recall of all vehicles in the engine family or test group. If vehicles or engines have systemic failures of on-board computers, found to meet or exceed four percent or 50 (whichever is greater) within an engine family or test group the required corrective action will also be the recall of all affected vehicles.

(b) At the sole discretion of the Executive Officer, the manufacturer shall perform corrective action, including, but not limited to, providing an extended warranty as defined in Section 2166.1, for the circumstances specified in (a), either as an alternative to or in addition to the recall specified in (a).

(c) Manufacturers that warrant their vehicles or engines for the full useful life period may not, at the sole discretion of the Executive Officer, be required to perform corrective action on systemic failures of emission-control components (with the exception of exhaust after-treatment devices), found to meet or exceed four percent or 50 (whichever is greater) within an engine family or test group, or subgroup.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

Section 2172. Notification of Required Recall or Corrective Action by the Executive Officer.

The Executive Officer shall notify the manufacturer when recall or corrective action is required. The Executive Officer's notification shall include a description of each class or category of vehicles or engines encompassed by the determination of nonconformity, shall set forth the factual basis for the determination and shall designate a date within 45 days from the date of receipt of such notification (within 90 days for recalls) by which the manufacturer shall submit a plan to remedy the nonconformity unless the manufacturer can show good cause for the Executive Officer to extend the deadline.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

Section 2172.1. Ordered or Voluntary Corrective Action Plan.

(a) Unless a public hearing is requested by the manufacturer, the manufacturer shall submit a recall or corrective action plan to the Chief, Mobile Source Operations Division, 9480 Telstar Avenue, Suite 4, El Monte, CA 91731, within the time limit specified in the notification. The Executive Officer may grant the manufacturer an extension upon good cause shown.

(b) The recall or corrective action plan shall contain the following:

(1) A description of each class or category of vehicles or engines to be recalled or subject to corrective action, including the engine family, test group or sub-group thereof, the model-year, the make, the model, and such other information as may be required to identify the vehicles or engines to be recalled.

(2) A description of the nonconformity and the specific modifications, alterations, repairs, corrections, adjustments or other changes to be made to bring the vehicles or engines into conformity with the requirements of this article including a brief summary of

the data and technical studies which support the manufacturer's decision regarding the specific corrections to be made. Nonconformities shall be addressed by replacing a non-conforming component with an improved, conforming component.

(3) A description of the method by which the manufacturer will determine the names and addresses of vehicle or engine owners and the method by which they will be notified.

(4) A description of the procedure to be followed by vehicle or engine owners to obtain correction of the nonconformity including the date on or after which the owner can have the nonconformity remedied, the time reasonably necessary to perform the labor required to correct the nonconformity, and the designation of facilities at which the nonconformity can be remedied. The repair shall be completed within a reasonable time designated by the Executive Officer from the date the owner delivers the vehicle or engine for repair. This requirement becomes applicable on the date designated by the manufacturer as the date on or after which the owner can have the nonconformity remedied.

(5) If some or all of the nonconforming vehicles or engines are to be remedied by persons other than dealers or authorized warranty agents of the manufacturer, a description of such class of persons and a statement indicating that the participating members of the class will be properly equipped to perform such remedial action.

(6) A copy of the letter of notification to be sent to vehicle or engine owners.

(7) A description of the system by which the manufacturer will ensure that an adequate supply of parts will be available to perform the repair under the recall or corrective action plan including the date by which an adequate supply of parts will be available to initiate the repair campaign, and the method to be used to assure the supply remains both adequate and responsive to owner demand.

(8) A copy of all necessary instructions to be sent to those persons who are to perform the repair under the recall or corrective action plan.

(9) Any other information, reports, or data which the Executive Officer may reasonably determine to be necessary to evaluate the recall plan or other corrective action.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

#### Section 2172.2. Approval and Implementation of Corrective Action Plan.

If the Executive Officer finds that the recall or corrective action plan is designed effectively to correct the nonconformity and complies with the provisions of Section 2172.1, he or she will so notify the manufacturer in writing. Upon receipt of the approval notice from the Executive Officer, the manufacturer shall commence implementation of the approved plan. Notification of vehicle or engine owners and the implementation of

repairs shall commence within 45 days of the receipt of notice unless the manufacturer can show good cause for the Executive Officer to extend the deadline.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

### Section 2172.3. Notification of Owners.

(a) Manufacturers shall notify vehicle or engine owners of a recall or other corrective action by first class mail or by such other means as approved by the Executive Officer provided, that for good cause, the Executive Officer may require the use of certified mail to ensure an effective notification.

(b) The manufacturer shall use all reasonable means necessary to locate vehicle or engine owners provided, that for good cause, the Executive Officer may require the manufacturer to use motor vehicle registration lists available from State or commercial sources to obtain the names and addresses of vehicle or engine owners to ensure effective notification.

(c) The Executive Officer may require subsequent notification by the manufacturer to vehicle or engine owners by first class mail or other reasonable means provided, that for good cause, the Executive Officer may require the use of certified mail to ensure effective notification.

(d) The notification of vehicle or engine owners shall contain the following:

(1) The statement: "the California Air Resources Board has determined that your (vehicle or engine) (is or may be) releasing air pollutants which exceed (California or California and Federal) standards, or that the manufacturer violated emissions test procedures. These standards and test procedures were established to protect your health and welfare from the dangers of air pollution."

(2) A statement that the nonconformity of any such vehicles or engines will be remedied at the expense of the manufacturer.

(3) A statement that eligibility may not be denied solely on the basis that the vehicle or engine owner used parts not manufactured by the original equipment vehicle manufacturer, or had repairs performed by outlets other than the vehicle or engine manufacturer's franchised dealers.

(4) A clear description of the components which will be affected by the recall or other corrective action and a general statement of the measures to be taken to correct the nonconformity.

(5) A statement that such nonconformity, if not repaired, may cause the vehicle or

engine to fail an emission inspection or Smog Check test when such tests are required under State law.

(6) A description of the adverse effects, if any, that an uncorrected nonconformity would have on the performance, fuel economy, or driveability of the vehicle or engine or to the function of other engine components.

(7) A description of the procedure which the vehicle or engine owner should follow to obtain correction of the nonconformity including the date on or after which the owner can have the nonconformity remedied, the time reasonably necessary to correct the nonconformity, and a designation of the facilities at which the nonconformity can be remedied.

(8) A statement that a certificate showing that the vehicle has been repaired under the recall program shall be issued by the service facilities and that such a certificate may be required as a condition of vehicle registration or operation, as applicable.

(9) A card to be used by a vehicle or engine owner in the event the vehicle or engine to be recalled has been sold. Such card should be addressed to the manufacturer, have postage paid, and shall provide a space in which the owner may indicate the name and address of the person to whom the vehicle or engine was sold.

(10) The statement: "In order to ensure your full protection under the emission warranty made applicable to your (vehicle or engine) by State or Federal law, and your right to participate in future recalls, it is recommended that you have your (vehicle or engine) serviced as soon as possible. Failure to do so could be determined to be a lack of proper maintenance of your (vehicle or engine)." This statement is not required for off-road motorcycles or all-terrain vehicles.

(11) A telephone number provided by the manufacturer, which may be used to report difficulty in obtaining recall repairs.

(e) The manufacturer shall not condition eligibility for repair on the proper maintenance or use of the vehicle except for strong or compelling reasons and with approval of the Executive Officer; however, the manufacturer shall not be obligated to repair a component which has been removed or altered so that the recall action cannot be performed without additional cost.

(f) No notice sent pursuant to Section 2172(b)(8), above, nor any other communication sent to vehicle or engine owners or dealers shall contain any statement, express or implied, that the nonconformity does not exist or will not degrade air quality.

(g) The manufacturer shall be informed of any other requirements pertaining to the notification under this section which the Executive Officer has determined are reasonable and necessary to ensure the effectiveness of the recall campaign.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013,

43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

#### Section 2172.4. Repair Label.

(a) The manufacturer shall require those who perform the repair under the recall plan to affix a label to each vehicle or engine repaired or, when required, inspected under the recall plan.

(b) The label shall be placed in a location as approved by the Executive Officer and shall be fabricated of a material suitable for such location and which is not readily removable.

(c) The label shall contain the recall campaign number and a code designating the facility at which the repair, inspection for repair, was performed.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

#### Section 2172.5. Proof of Correction Certificate.

The manufacturer shall require those who perform the recall repair to provide the owner of each vehicle or engine repaired with a certificate, through a protocol and in a format prescribed by the Executive Officer, which indicates that the noncomplying vehicle or engine has been corrected under the recall program.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

#### Section 2172.6. Preliminary Tests.

The Executive Officer may require the manufacturer to conduct tests on components and vehicles or engines incorporating a proposed correction, repair, or modification reasonably designed and necessary to demonstrate the effectiveness of the correction, repair, or modification.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

### Section 2172.7. Communication with Repair Personnel.

The manufacturer shall provide to the Executive Officer a copy of all communications which relate to the recall plan directed to dealers and other persons who are to perform the repair. Such copies shall be mailed to the Executive Officer contemporaneously with their transmission to dealers and other persons who are to perform the repair under the recall plan.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

### Section 2172.8. Recordkeeping and Reporting Requirements.

(a) The manufacturer shall maintain sufficient records to enable the Executive Officer to conduct an analysis of the adequacy of the recall or corrective action campaign. The records shall include, for each class or category of vehicle or engine, but need not be limited to, the following:

- (1) Engine family involved and recall or corrective action campaign number as designated by the manufacturer.
- (2) Date owner notification was begun, and date completed.
- (3) Number of vehicles or engines involved in the recall or corrective action campaign.
- (4) Number of vehicles or engines known or estimated to be affected by the nonconformity.
- (5) Number of vehicles or engines inspected pursuant to the recall plan and found to be affected by the nonconformity.
- (6) Number of inspected vehicles or engines.
- (7) Number of vehicles or engines receiving repair under the recall plan.
- (8) Number of vehicles or engines determined to be unavailable for inspection or repair under the recall plan due to exportation, theft, scrapping, or for other reasons (specify).
- (9) Number of vehicles or engines determined to be ineligible for recall action due to removed or altered components.
- (10) A listing of the identification numbers of vehicles or engines subject to recall but for whose repair the manufacturer has not been invoiced. This listing shall be supplied in a standardized computer data storage device to be specified by the Executive Officer. The frequency of this submittal, as specified in subsection (c) below, may be changed by the Executive Officer depending on the needs of recall enforcement.



(11) Any service bulletins transmitted to dealers which relate to the nonconformity and which have not previously been submitted.

(12) All communications transmitted to vehicle or engine owners which relate to the nonconformity and which have not previously been submitted.

(b) If the manufacturer determines that the original responses to subsections (a)(3) and (4) of these procedures are incorrect, revised figures and an explanatory note shall be submitted. Responses to subsections (a)(5), (6), (7), (8), and (9) shall be cumulative totals.

(c) Unless otherwise directed by the Executive Officer, the information specified in subsection (a) of these procedures shall be included in six quarterly reports, beginning with the quarter in which the notification of owners was initiated, or until all nonconforming vehicles or engines involved in the campaign have been remedied, whichever occurs sooner. Such reports shall be submitted no later than 25 days after the close of each calendar quarter.

(d) The manufacturer shall maintain in a form suitable for inspection, such as computer information storage devices or card files, and shall make available to the Executive Officer or his or her authorized representative upon request, lists of the names and addresses of vehicle or engine owners:

(1) To whom notification was given;

(2) Who received remedial repair or inspection under the recall plan; and

(3) Who were denied eligibility for repair due to removed or altered components.

(e) The records and reports required by these procedures shall be retained for not less than one year beyond the useful life of the vehicles or engines involved, or one year beyond the reporting time frame specified in subsection (c) above, whichever is later.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

Section 2172.9. Extension of Time.

The Executive Officer may extend any deadline in the plan if he or she finds in writing that a manufacturer has shown good cause for such extension.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

Section 2173. Penalties.

Failure by a manufacturer to carry out all recall or corrective action campaigns ordered by the Executive Officer pursuant to this article shall constitute a violation of this article and Health and Safety Code Section 43105. Civil penalties may be assessed for that violation and for any other violation of any other requirement of this article.

Note: Authority cited: Sections 39600, 39601, 43013, 43018, 43105 and 43106, Health and Safety Code. Reference: Health and Safety Code Sections 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

Section 2174. Availability of Public Hearing.

(a) The manufacturer may request a public hearing pursuant to the procedures set forth in Sections 60040 to 60053, Title 17, California Code of Regulations to contest the finding of nonconformity and the necessity for or the scope of any ordered recall, or other ordered corrective action. Notwithstanding any other provision in title 13 or title 17 of California Code of Regulations, the record in any public hearing conducted pursuant a request made under this section shall be limited to the information provided to the Executive Officer under sections 2167-2171 prior to the date the Executive Officer's notification is issued pursuant to section 2172, or to information referenced in the Executive Officer's notification.

(b) If a manufacturer requests a public hearing pursuant to subsection (a) above, and if the Executive Officer's determination of nonconformity is confirmed at the hearing, the manufacturer shall submit a recall or corrective action plan identical to the one required by Section 2172.1 within 30 days after receipt of the Board's decision.

Note: Authority cited: Sections 39600, 39601 and 43105, Health and Safety Code. Reference: Sections 43000, 43009.5, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

Attachment B

Emission Test Procedure Changes

California Environmental Protection Agency  
AIR RESOURCES BOARD

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR  
2001 AND SUBSEQUENT MODEL  
**PASSENGER CARS, LIGHT-DUTY TRUCKS, AND MEDIUM-DUTY VEHICLES**

Adopted: August 5, 1999  
Amended: December 27, 2000  
Amended: July 30, 2002  
Amended: September 5, 2003 (corrected February 20, 2004)  
Amended: May 28, 2004  
Amended: August 4, 2005  
Amended: [INSERT DATE OF AMENDMENT]  
Amended: [INSERT DATE OF AMENDMENT]

Note: The proposed amendments to this document are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions compared to the test procedures as adopted by the Board on June 22, 2006. Amendments to this document as adopted on June 22, 2006 are indicated by double underline to indicate additions and ~~double strikeout~~ to indicate deletions compared to the test procedures as amended on August 2, 2005. Existing intervening test that is not amended is indicated by “\* \* \*”.

**CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES  
FOR 2001 AND SUBSEQUENT MODEL  
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES**

The provisions of Subparts B, C, and S, Part 86, Title 40, Code of Federal Regulations, as adopted or amended on May 4, 1999 or as last amended on such other date set forth next to the 40 CFR Part 86 section title listed below, and to the extent they pertain to exhaust emission standards and test procedures, are hereby adopted as the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," with the following exceptions and additions.

**PART I: GENERAL PROVISIONS FOR CERTIFICATION AND IN-USE  
VERIFICATION OF EMISSIONS**

\* \* \* \*

**F. Requirements and Procedures for Durability Demonstration**

\* \* \* \*

**4. §86.1823 Durability demonstration procedures for exhaust emissions**

4.1 §86.1823-01 October 6, 2000. Amend as follows: Add the following sentences to the first paragraph: Beginning with 2010 model-year vehicles or engines, at the time of certification manufacturers shall state, based on good engineering judgment and information available at that time, that the emission control devices on their vehicles or engines are designed and will be manufactured to operate properly for the full useful life of the vehicles or engines. If any emission control device fails at a valid failure rate of at least four percent or 50 vehicles (whichever is greater) in an engine family or test group over the applicable warranty period of the vehicles or engines they are installed in, it constitutes a violation of these test procedures and it entitles the Executive Officer of the Air Resources Board to require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174. Vehicles and engines tested for certification shall be, in all material respects, substantially the same as production vehicles and engines. If production vehicles have warranty claims rates in use that exceed four percent or fifty (whichever is greater) it is conclusive proof that vehicles and engines tested for certification are not, in all material respects,

substantially the same as production vehicles and engines. If any emission control device fails at this rate, that constitutes a violation of these test procedures and it entitles the Executive Officer of the Air Resources Board to require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174.

\* \* \* \*

State of California  
AIR RESOURCES BOARD

**CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES  
FOR 2004 AND SUBSEQUENT MODEL  
HEAVY-DUTY DIESEL-ENGINES AND VEHICLES**

Adopted: December 12, 2002  
Amended: July 24, 2003  
Amended: [INSERT DATE OF AMENDMENT]

Note: The proposed amendments to this document are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions compared to the test procedures as adopted by the Board. Existing intervening test that is not amended is indicated by “\* \* \*”.

**CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES  
FOR 2004 AND SUBSEQUENT MODEL  
HEAVY-DUTY DIESEL-ENGINES AND VEHICLES**

The following provisions of Subparts A, I, and N, Part 86, Title 40, Code of Federal Regulations, as adopted or amended by the U.S. Environmental Protection Agency on the date set forth next to the 40 CFR Part 86 section listed below, and only to the extent they pertain to the testing and compliance of exhaust emissions from heavy-duty diesel engines and vehicles, are adopted and incorporated herein by this reference as the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles," except as altered or replaced by the provisions set forth below.

\* \* \* \*

26. **§86.004-26 Mileage and service accumulation; emission measurements. October 6, 2000**

\* \* \* \*

§86.004-26 October 6, 2000. Amend as follows: Add the following sentences to the first paragraph: Beginning with 2010 model-year vehicles or engines, at the time of certification manufacturers shall state, based on good engineering judgment and information available at that time, that the emission control devices on their vehicles or engines are designed and will be manufactured to operate properly for the full useful life of the vehicles or engines. If any emission control device fails at a valid failure rate of at least four percent or 50 vehicles (whichever is greater) in an engine family or test group over the applicable warranty period of the vehicles or engines they are installed in, it constitutes a violation of these test procedures and it entitles the Executive Officer of the Air Resources Board to require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174. Vehicles and engines tested for certification shall be, in all material respects, substantially the same as production vehicles and engines. If production vehicles have warranty claims rates in use that exceed four percent or 50 (whichever is greater), it is conclusive proof that vehicles and engines tested for certification are not, in all material respects, substantially the same as production vehicles and engines. If any emission control device fails at this rate, that constitutes a violation of these test



procedures and it entitles the Executive Officer of the Air Resources Board to require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174.

\* \* \* \*

**State of California  
AIR RESOURCES BOARD**

**CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR  
2004 AND SUBSEQUENT MODEL  
HEAVY DUTY OTTO CYCLE ENGINES**

Adopted: December 27, 2000  
Amended: December 12, 2002  
Amended: [INSERT DATE OF AMENDMENT]

Note: The proposed amendments to this document are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions compared to the test procedures as adopted by the Board. Existing intervening test that is not amended is indicated by

“\* \* \*” .

**CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST  
PROCEDURES FOR 2004 AND SUBSEQUENT MODEL  
HEAVY DUTY OTTO CYCLE ENGINES**

The following provisions of Subparts A, N, and P, Part 86, Title 40, Code of Federal Regulations (“CFR”), as adopted or amended by the U.S. Environmental Protection Agency on the date set forth next to the 40 CFR Part 86 section listed below, and only to the extent they pertain to the testing and compliance of exhaust emissions from heavy-duty Otto-cycle engines, are adopted and incorporated herein by this reference as the “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines,” with the following exceptions and additions.

\* \* \* \*

**26. §86.004-26 Mileage and service accumulation; emission  
measurements. October 6, 2000**

\* \* \* \*

§86.004-26 October 6, 2000. Amend as follows: Add the following sentences to the first paragraph: Beginning with 2010 model-year vehicles or engines, at the time of certification manufacturers shall state, based on good engineering judgment and information available at that time, that the emission control devices on their vehicles or engines are designed and will be manufactured to operate properly for the full useful life of the vehicles or engines. If any emission control device fails at a valid failure rate of at least four percent or 50 vehicles (whichever is greater) in an engine family or test group over the applicable warranty period of the vehicles or engines they are installed in, it constitutes a violation of these test procedures and it entitles the Executive Officer of the Air Resources Board to require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174. Vehicles and engines tested for certification shall be, in all material respects, substantially the same as production vehicles and engines. If production vehicles have warranty claims rates in use that exceed four percent or 50 (whichever is greater), it is conclusive proof that vehicles and engines tested for certification are not, in all material respects, substantially the same as production vehicles and engines. If any emission control device fails at this rate, that constitutes a violation of these test procedures and it entitles the Executive Officer of the Air Resources Board to

require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174.

\* \* \* \*

State of California  
AIR RESOURCES BOARD

**CALIFORNIA REFUELING EMISSION STANDARDS AND TEST PROCEDURES  
FOR 2001 AND SUBSEQUENT MODEL MOTOR VEHICLES**

Adopted: August 5, 1999  
Amended: September 5, 2003  
Amended: [INSERT DATE OF AMENDMENT]

Note: The proposed amendments to this document are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions compared to the test procedures as adopted by the Board. Existing intervening test that is not amended is indicated by “\* \* \*”.

## CALIFORNIA REFUELING EMISSION STANDARDS AND TEST PROCEDURES FOR 2001 AND SUBSEQUENT MODEL MOTOR VEHICLES

The provisions of Title 40, Code of Federal Regulations (CFR), Part 86, Subparts B (as adopted or amended by the U.S. Environmental Protection Agency (U.S. EPA) on the date listed) and S (as adopted on May 4, 1999, or as last amended on such other date set forth next to the 40 CFR Part 86 section title listed below) to the extent they pertain to the testing and compliance of vehicle refueling emissions for passenger cars, light-duty trucks and medium-duty vehicles, are hereby adopted as the "California Refueling Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles" with the following exceptions and additions.

### Subpart S Requirements

#### I. General Certification Requirements for Refueling Emissions

\* \* \* \*

#### G. §86.1825-01 Durability Demonstration procedures for refueling emissions.

§86.1825-01 October 6, 2000. Amend as follows: Add the following sentences to the first paragraph: Beginning with 2010 model-year vehicles or engines, at the time of certification manufacturers shall state, based on good engineering judgment and information available at that time, that the emission control devices on their vehicles or engines are designed and will be manufactured to operate properly for the full useful life of the vehicles or engines. If any emission control device fails at a valid failure rate of at least four percent or 50 vehicles (whichever is greater) in an engine family or test group over the applicable warranty period of the vehicles or engines they are installed in, it constitutes a violation of these test procedures and it entitles the Executive Officer of the Air Resources Board to require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174. Vehicles and engines tested for certification shall be, in all material respects, substantially the same as production vehicles and engines. If production vehicles have warranty claims rates in use that exceed four percent or 50 (whichever is greater), it is conclusive

proof that vehicles and engines tested for certification are not, in all material respects, substantially the same as production vehicles and engines. If any emission control device fails at this rate, that constitutes a violation of these test procedures and it entitles the Executive Officer of the Air Resources Board to require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174.

\* \* \* \*

State of California  
AIR RESOURCES BOARD

**CALIFORNIA EVAPORATIVE EMISSION STANDARDS AND TEST PROCEDURES  
FOR 2001 AND SUBSEQUENT MODEL MOTOR VEHICLES**

Adopted: August 5, 1999

Amended:           [INSERT DATE OF AMENDMENT]

Note: The proposed amendments to this document are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions compared to the test procedures as adopted by the Board. Existing intervening test that is not amended is indicated by  
“\* \* \*” .



## CALIFORNIA EVAPORATIVE EMISSION STANDARDS AND TEST PROCEDURES FOR 2001 AND SUBSEQUENT MODEL MOTOR VEHICLES

The provisions of Title 40, Code of Federal Regulations (CFR), Part 86, Subparts A and B as adopted or amended as of July 1, 1989, and Subpart S as adopted or amended on May 4, 1999, insofar as those subparts pertain to evaporative emission standards and test procedures, are hereby adopted as the California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Years, with the following exceptions and additions:

### PART I. GENERAL CERTIFICATION REQUIREMENTS FOR EVAPORATIVE EMISSIONS

\* \* \* \*

### PART II. DURABILITY DEMONSTRATION

\* \* \* \*

#### 2. Durability Demonstration Procedures for Evaporative Emissions

Add new section 2.0: Amend as follows: Add the following sentences to the first paragraph: Beginning with 2010 model-year vehicles or engines, at the time of certification manufacturers shall state, based on good engineering judgment and information available at that time, that the emission control devices on their vehicles or engines are designed and will be manufactured to operate properly for the full useful life of the vehicles or engines. If any emission control device fails at a valid failure rate of at least four percent or 50 vehicles (whichever is greater) in an engine family or test group over the applicable warranty period of the vehicles or engines they are installed in, it constitutes a violation of these test procedures and it entitles the Executive Officer of the Air Resources Board to require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174. Vehicles and engines tested for certification shall be, in all material respects, substantially the same as production vehicles and engines. If production vehicles have warranty claims rates in use that exceed four percent or 50 (whichever is greater), it is conclusive

proof that vehicles and engines tested for certification are not, in all material respects, substantially the same as production vehicles and engines. If any emission control device fails at this rate, that constitutes a violation of these test procedures and it entitles the Executive Officer of the Air Resources Board to require that the vehicles or engines they are installed in be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174.

\* \* \* \*

Attachment C

State of California  
AIR RESOURCES BOARD

Staff Proposed 15-Day Changes  
December 5, 2006

Regarding the ARB Staff's Proposed Amendments  
to the  
Emission Warranty Information Reporting  
And Recall Regulations and Test Procedures

Staff will propose, as 15-day changes, the following:

- 1) Regulatory language that would allow the manufacturer to request a delay in the submission of the plan to remedy a nonconformity required in proposed Section 2172 provided good cause is provided to and approved by the Executive Officer.
- 2) Regulatory language in proposed Section 2168 that will address "infant mortality" warranty issues provided appropriate corrective action is implemented and satisfactorily completed early in the useful life of the affected vehicles or engines. Discounting of the infant mortality data against total parts claims should be noted in subsequent EWIR and SEWIR reports as appropriate, upon review and approval by the Executive Officer.
- 3) Regulatory language in proposed Section 2168 that will allow a manufacturer to voluntarily initiate voluntary corrective action for defects that it wishes to correct before any trigger is exceeded. Such corrective action must be done under the supervision of and with the approval of the Executive Officer and does not affect the "running change" process. Discounting of the voluntary action data should be noted in subsequent EWIR and SEWIR reports as appropriate.
- 4) Regulatory language in proposed Section 2166(i) that would include "light-heavy" duty engines in the medium-duty vehicle category when determining the extended warranty time and mileage period should corrective action be required. The extended warranty period would be 15 years or 150,000 miles (whichever first occurs) for "light-heavy" duty engines.
- 5) Regulatory language in proposed Section 2166 that defines the term "defective emission-control component" or "defective emission-related component" to be any component that is installed on a California-certified vehicle or engine that is considered

to be a “warranted part” pursuant to Section 2035 that is not replaced or repaired solely for customer relations reasons or misdiagnosis and does not have a mechanical defect, will not fail to operate properly within the manufacturer’s specifications during its certified useful life and will not increase emissions under any conceivable circumstance if it is not replaced. Components replaced under warranty that meet this definition may be excluded from calculating the valid failure rate required in Section 2168 upon approval by the Executive Officer.

6) Regulatory language that clearly specifies that, when a manufacturer submits the Statement of Compliance that is required during the certification process, the manufacturer acknowledges, to the best of its knowledge at that time, that the emission-control components installed on vehicles or engines in a specific engine family or test group will be durable for the certified useful life and systemic failures are not anticipated to occur.

7) The definition of “emission-control component” or “emission-related component” in proposed Section 2166(e) will be revised to mean: a device, system or assembly described in the manufacturer’s approved application for certification which is considered to be a “warranted part” pursuant to Section 2035 and subject to proposed Article 5: Procedures for Reporting Failures of Emission-Related Equipment and Related Corrective Action.

8) Regulatory language in proposed Section 2166(i) that limits the extended warranty time and mileage period to 10 years or 150,000 miles (whichever first occurs) as corrective action for systemic defects for the propulsion battery pack utilized on HEV-certified vehicles.

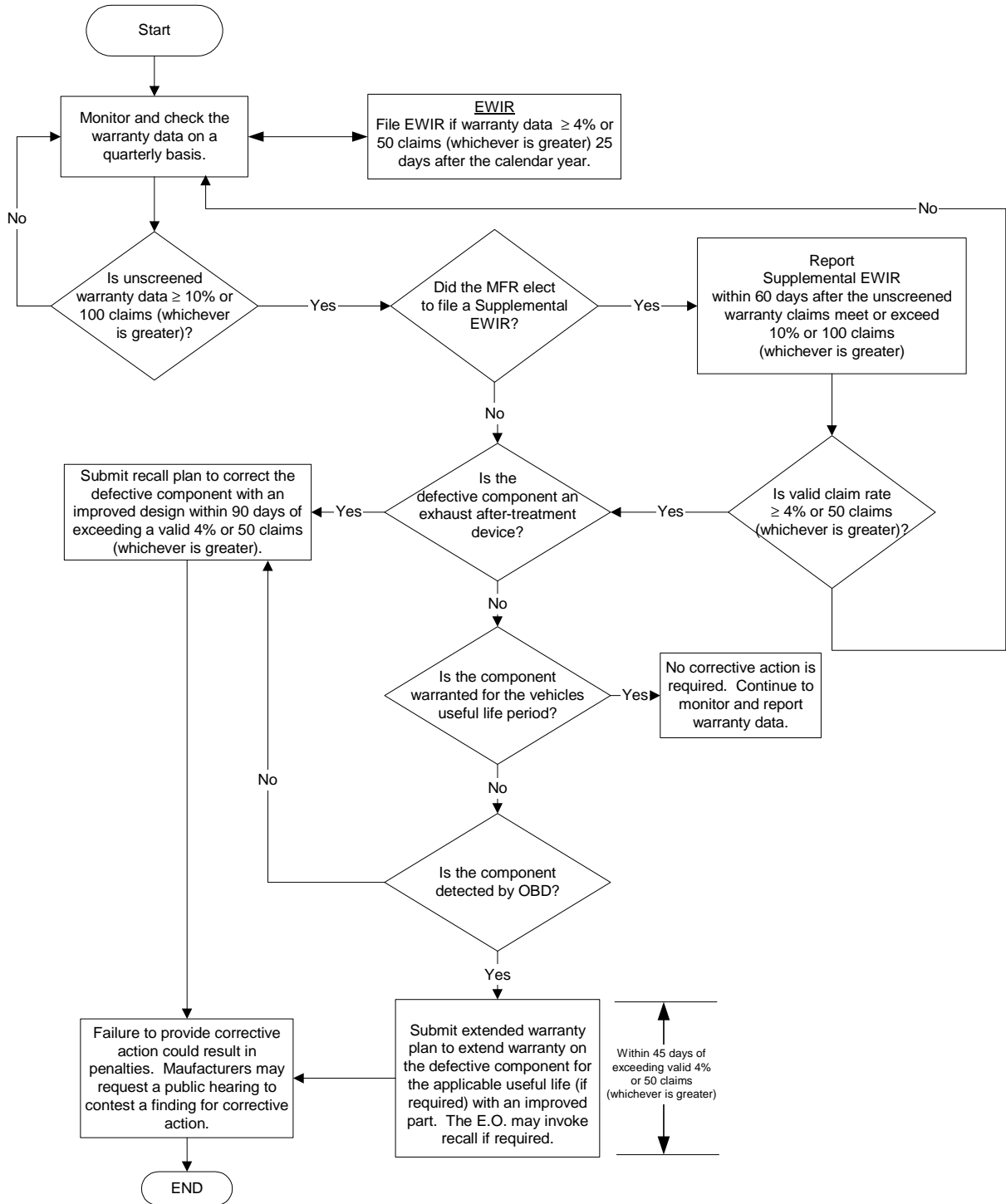
9) Changes to the applicable test procedure sections: clarifying the concepts of useful life and warranty periods for purposes of determining the four percent failure rate; and, providing that production vehicles must in all material respects be substantially the same as certification test vehicles, and further providing that component failures greater than four percent indicate a violation of this requirement as well as a violation of Article 5 of the proposed regulations.

10) Regulatory language that would allow manufacturers to submit information, which may include an engineering evaluation, as part of the SEWIR to demonstrate for the review and approval of the Executive Officer that under no conceivable circumstance may a specific emission control component defect result in an increase in emissions over that of a properly operating vehicle or engine without the defect. Components replaced under warranty that meet the above circumstance may be excluded from calculating the valid failure rate required in Section 2168 upon approval by the Executive Officer.

11) Additional non-substantive regulatory language changes needed for clarification.

# Attachment D

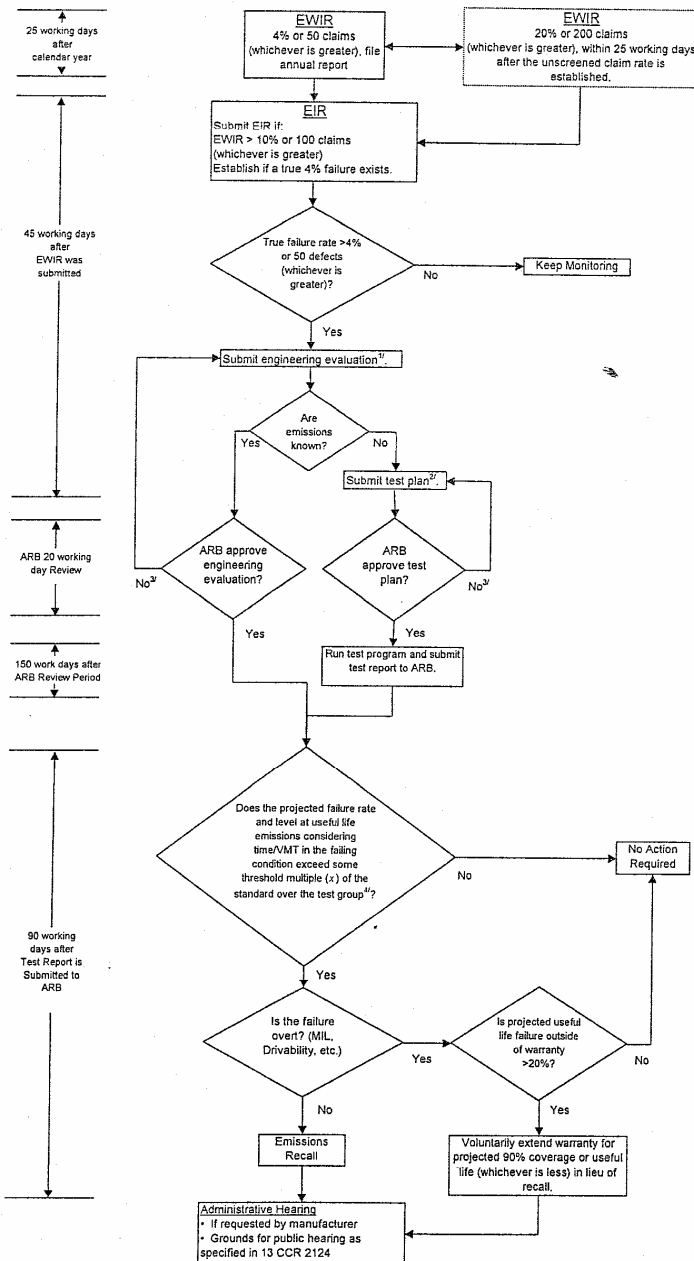
## Proposed Warranty Reporting and Corrective Action Requirements



# Attachment E

## Alliance Proposal - May 2006

**Proposed Amendments to the Warranty Reporting Requirement Regulations - Flowchart  
Process Description for Passenger Cars and Light Duty Trucks (LDTs)**



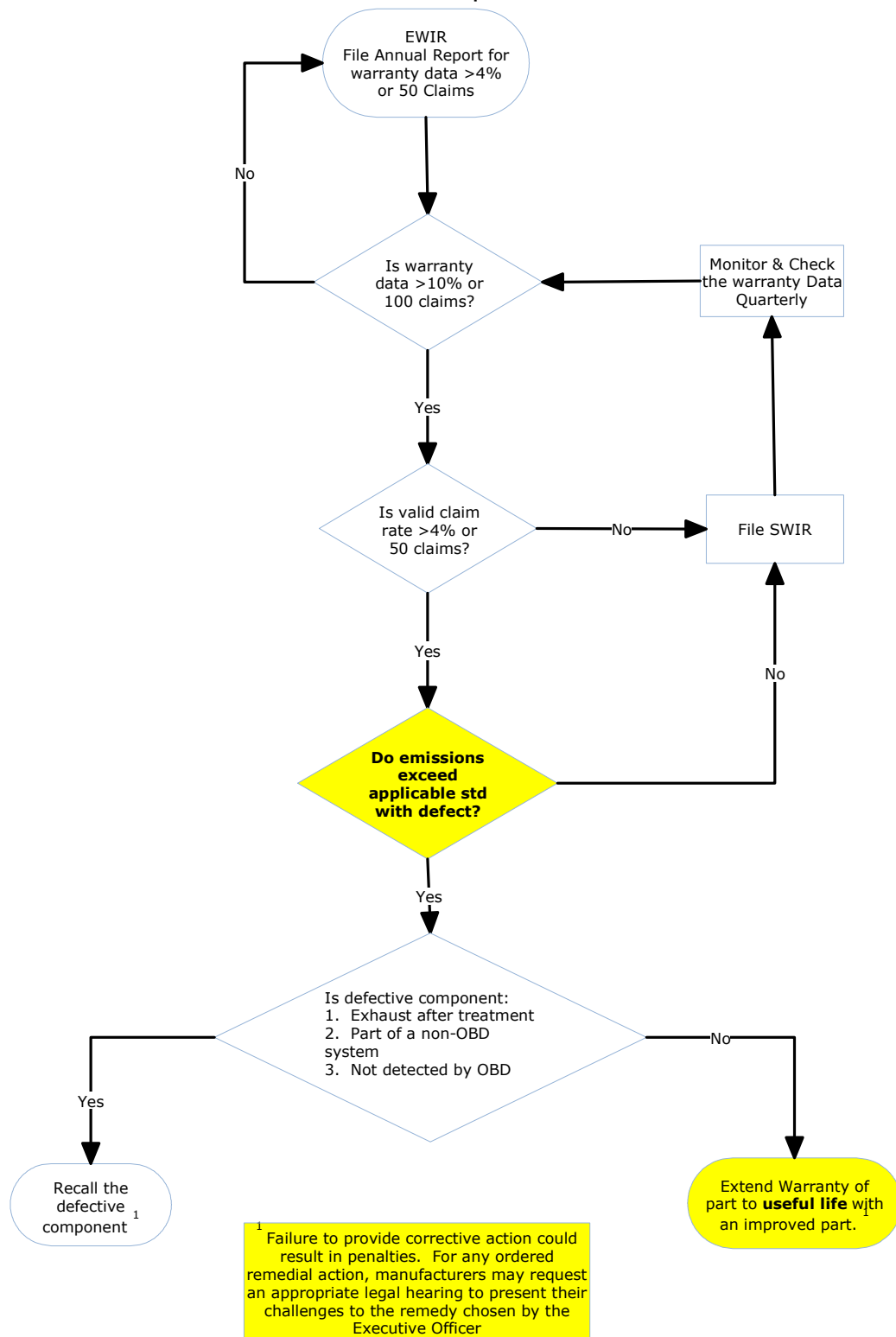
<sup>11</sup> Engineering Evaluation includes: description of the defect, description of potentially affected vehicles, projected failure rate at useful life (UL), evaluation of the emissions impact of the defect, available data, description of indicators that will notify the driver to the problem (e.g. drivability, MIL illumination), projected repair rate due to overt indication.

<sup>12</sup> Test plan must be representative of a typical failure mode to determine the emissions impact for a substantial number of vehicles.

<sup>13</sup> The manufacturer may request an Adjudicatory Hearing pursuant to Sections 60040 through 60053, Title 17, CCR after good faith efforts to resolve issues about the test plan or engineering evaluation have been exhausted.

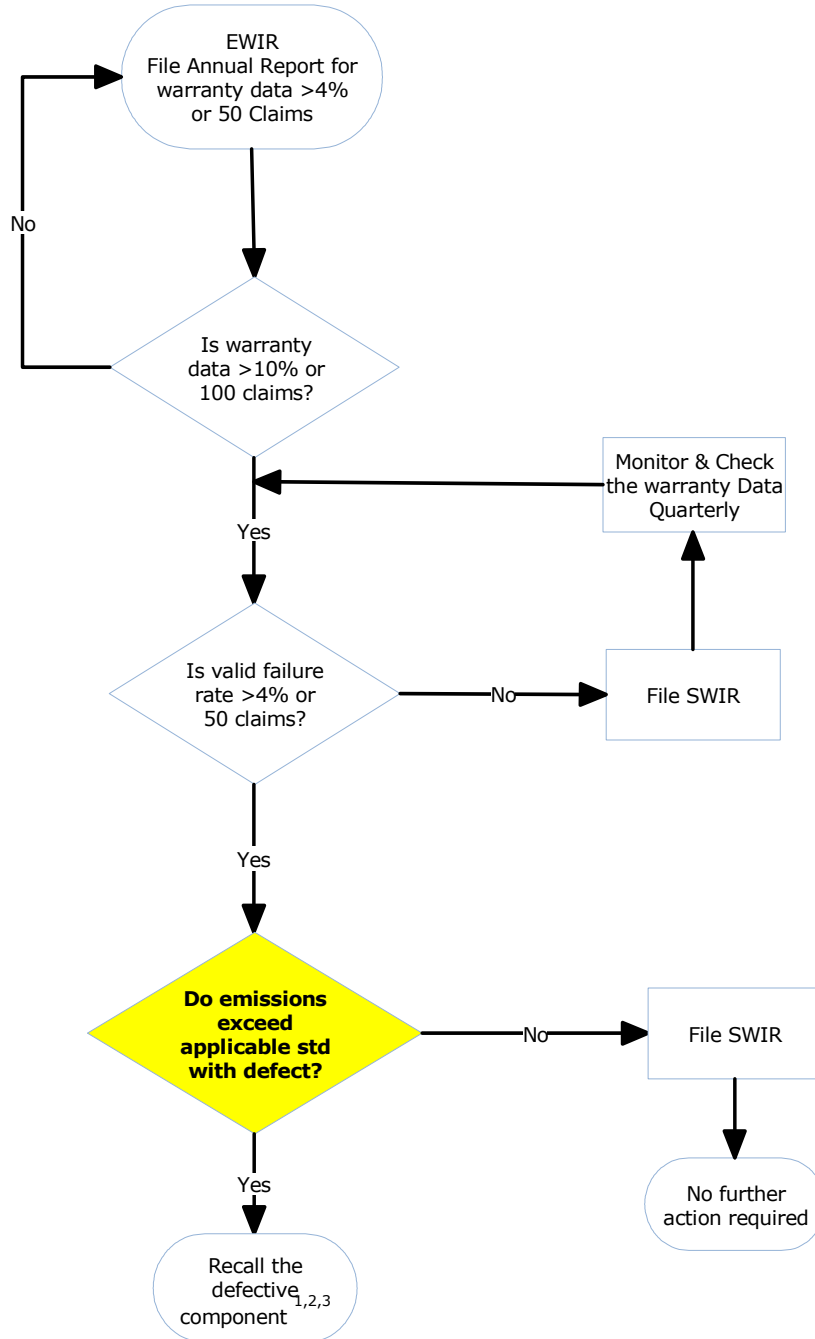
<sup>14</sup> Please see attached examples for clarification.

## Attachment F Alliance Proposal - November 2006



# Attachment G

## Alliance Proposal - January 16, 2007



<sup>1</sup>  
<sup>2</sup> Failure to provide corrective action could result in penalties.  
For any ordered recall, manufacturers may request an appropriate legal hearing to present their challenges to the recall.  
<sup>3</sup> The Executive Officer may negotiate other alternative remedial action, such as extended warranties to useful life with the manufacturer in lieu of recall.



### California Emission Warranty Defect Reporting Emissions Evaluations

1. Within 15 working days of submitting the Supplemental Emission Warranty Information Report (SEWIR) in which a valid 4% failure rate is exceeded, the manufacturer will submit an engineering analysis or a test plan for approval by the Executive Officer. The Executive Officer shall approve or disapprove the engineering analysis or test plan within 30 working days of receipt providing appropriate justification for disapproval.
2. If the engineering analysis or test plan is disapproved by the Executive Officer, the manufacturer will conduct the following test program:
  - a. *Number of tests:* A manufacturer must test a minimum of five typical failed components, as identified in the EWIR, on at least one vehicle. Any additional testing must be completed within the *Initiation and completion of testing* requirements specified below.
  - b. *Initiation and completion of testing:* Testing must be completed within seven months of commencing the test program.
  - c. *Test Vehicle Procurement:* The manufacturer will procure properly maintained and used vehicles, or the manufacturer may submit an alternative vehicle procurement plan with prior Executive Officer review and approval on a reasonable basis.
  - d. *Emission Testing:* The manufacturer must, after consultation with the Executive Officer, submit a test plan describing the details of test procedures (e.g. FTP, Evap.) that will be conducted to adequately exercise the failed component.
  - e. *Testing facilities, procedures, quality assurance and quality control:* Test facility requirements as specified in the IUVP regulations, 40 CFR 68.1845-04(e) shall be applicable.
3. Remedial action will be required if the results of the testing show that the average test program results of any pollutant(s) exceeds the emissions standards and 50% of the tests for corresponding pollutant(s) exceed the emissions standards.

## **Attachment H**

**D-R-A-F-T (5/31/06)**

### **MOTORCYCLE INDUSTRY COUNCIL**

Motorcycle (Non-OBD)  
Recommended Warranty Reporting Process  
(All days = working days unless noted otherwise)

#### 1. EWIR Report

- Annually identify each emission-related part with warranty claims rate  $\geq 4\%$  or 50 claims, whichever is greater
  - Submit EWIR 25 days after end of each calendar year
- Claims rate rises to  $\geq 20\%$  or 200 claims, whichever is greater
  - Submit EWIR 25 days after data shows such rate
- Reporting obligation terminates after end of warranty period

#### 2. EIR Report

- Submit EIR for any emissions-related part if:
  - The EWIR shows a claims rate of  $\geq 10\%$  or 100 claims, whichever is greater
    - EIR report due 45 days after EWIR is submitted
- EIR Report requirement waived if mfr agrees to conduct recall
- Contents of EIR
  - Show unscreened claims rate
  - Show true failure rate after screening of invalid claims
  - Discuss whether defect may cause secondary damage to another emissions-related part
  - If true failure rate is  $\geq 4\%$  or 50 claims, whichever is greater, include a proposed Emissions Impact Evaluation Procedure (EIEP) for determining

whether the defect, by itself or through secondary damage if applicable, causes or is likely to cause a certification emission standard to be exceeded during the applicable warranty period. EIEP may be based on either or both of the following techniques:

- Engineering analysis
- Testing of one or more vehicle(s)
  - Can be a certification, durability, in-use, new production, or other representative vehicle
  - Can specify deviations from certification test procedure
- EIR Approval (ARB)
  - Deemed approved if not disapproved in writing in 20 days after submitted
  - If disapproved, manufacturer must submit revisions within 7 working days and CARB must approve/disapprove revisions within 7 working days after revisions submitted (repeat cycle until approval received)

### 3. Submittal of EIEP Results

- Results of EIEP must be submitted to CARB within 150 days after EIR approved, along with manufacturer's findings and proposed action
  - CARB must approve/disapprove within 20 days
    - Manufacturer entitled to meeting with staff (Division Chief or higher) to review/discuss any disapproval
  - If disapproved, and CARB orders a recall, manufacturer may request a hearing to contest necessity for or scope of recall order

### 4. Action Steps

- If EIEP results shows certification standard is not or will not be exceeded during warranty period, then NO FURTHER ACTION is required
  - Catalyst defect will be presumed to cause standard violation unless convincing evidence to contrary is presented
- If results show certification standard is or will be exceeded during warranty period, then RECALL is required unless:

- Manufacturer has installed a device that will detect the defect within 200 miles after the defect has occurred and will continuously warn the operator that an emissions defect exists (e.g. catalyst light)
- Defect causes overt drivability problems in substantially all vehicles with the defect, and manufacturer agrees to undertake a warranty field fix program through its dealers
- Average emissions of the engine families or vehicle groups with the defect are shown to be in compliance with the applicable certification standards.